AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

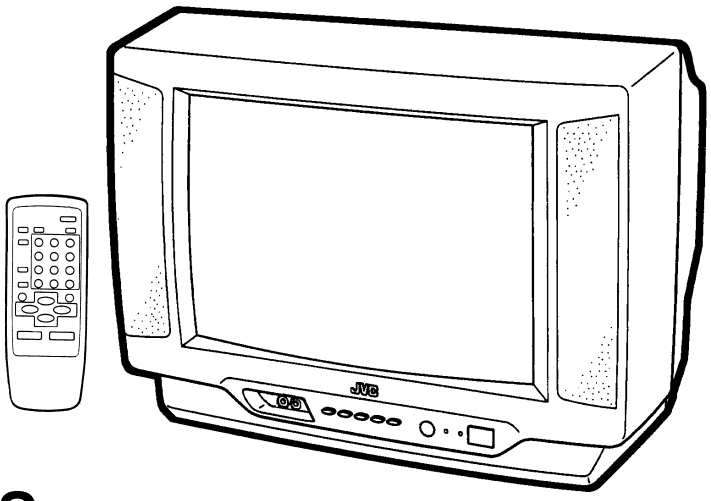
JVC

SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS
CG

AV-A14M3 / AV-A14T3
AV-A14M3(U) / AV-A14T3(HK)
AV-A14M3(-A) / AV-A14T3(-A)
AV-1413EE / AV-A14AU3



CONTENTS

■ SPECIFICATIONS ····· 2
★ OPERATING INSTRUCTIONS (APPENDIX) ····· 1-1
■ SAFETY PRECAUTIONS ····· 3
■ FEATURES ····· 4
■ MODEL ID. / MAIN DIFFERENCE LIST ····· 4
■ SPECIFIC SERVICE INSTRUCTIONS ····· 6
■ SERVICE ADJUSTMENTS ····· 13
★ STANDARD CIRCUIT DIAGRAM (APPENDIX) ····· 2-1
■ PARTS LIST ····· 31

COPYRIGHT © 2000 VICTOR COMPANY OF JAPAN, LTD.

No.51669
Jan. 2000

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

SPECIFICATIONS

Item		Content	
		AV-A14M3 / AV-A14M3(U) / AV-A14M3(-A)	**AV-A14T3 / AV-A14T3(HK) / AV-1413EE AV-A14T3(-A) / AV-A14AU3**
Dimensions(W × H × D)		364mm × 340.5mm × 375mm	←
Mass		9.9kg	
RF System		B / G, I, D / K, K1 & M	B / G, I, D / K, K1
Colour System	TV Mode	PAL / SECAM / NTSC	PAL / SECAM
	VIDEO Mode	PAL / SECAM / NTSC3.58 / NTSC4.43	←
Receiving Frequency	VHF (VL)	46.25MHz～168.25MHz	←
	VHF (VH)	175.25MHz～463.25MHz	←
	UHF	471.25MHz～863.25MHz	←
	CATV	● Cable TVs of Mid (X-Z, S1-S10) Super (S11-S20) & Hyper (S21-S41) bands receivable	
Intermediate Frequency	VIF Carrier	38.0MHz	←
	SIF Carrier	32.5MHz(5.5MHz) 31.5MHz (6.5MHz) 32.0MHz (6.0MHz)	←
Colour Sub Carrier Frequency		PAL (4.43MHz) SECAM (4.40625MHz / 4.25MHz) NTSC (3.58MHz / 4.43MHz)	←
Aerial Input Terminal		75Ω Unbalanced	←
Power Input	Rated Voltage	110～240VAC, 50 / 60Hz	←
Power Consumption		70W (Max.) / 47W (Avg.)	←
		———	70W (0.6A)at 220VAC [**for AV-A14T3(HK)]**
Picture Tube **High Voltage**		Visible size:34cm measured diagonally 22.5kV±1.5kV(at zero beam current)	←
Speaker		8cm, Round type	←
Audio Output		3W (monaural)	←
Input	Video	1Vp-p, 75Ω, RCA × 2	←
	Audio	500mVrms (-4dBs), High impedance, RCA × 2	←
Output	Video	1Vp-p, 75Ω, RCA × 1	←
	Audio	500mVrms (-4dBs), Low impedance, RCA × 1	←
Remote Control Unit		RM-C360 (Battery size : AA / R06 / UM-3 × 2)	←

Design & specifications are subject to change without notice.

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏦) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

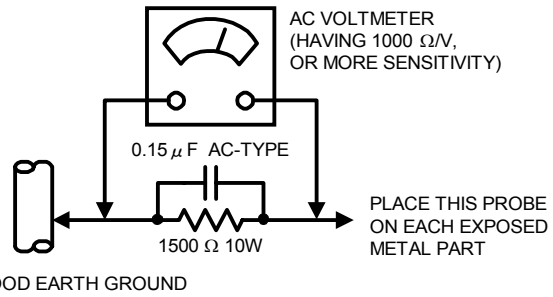
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



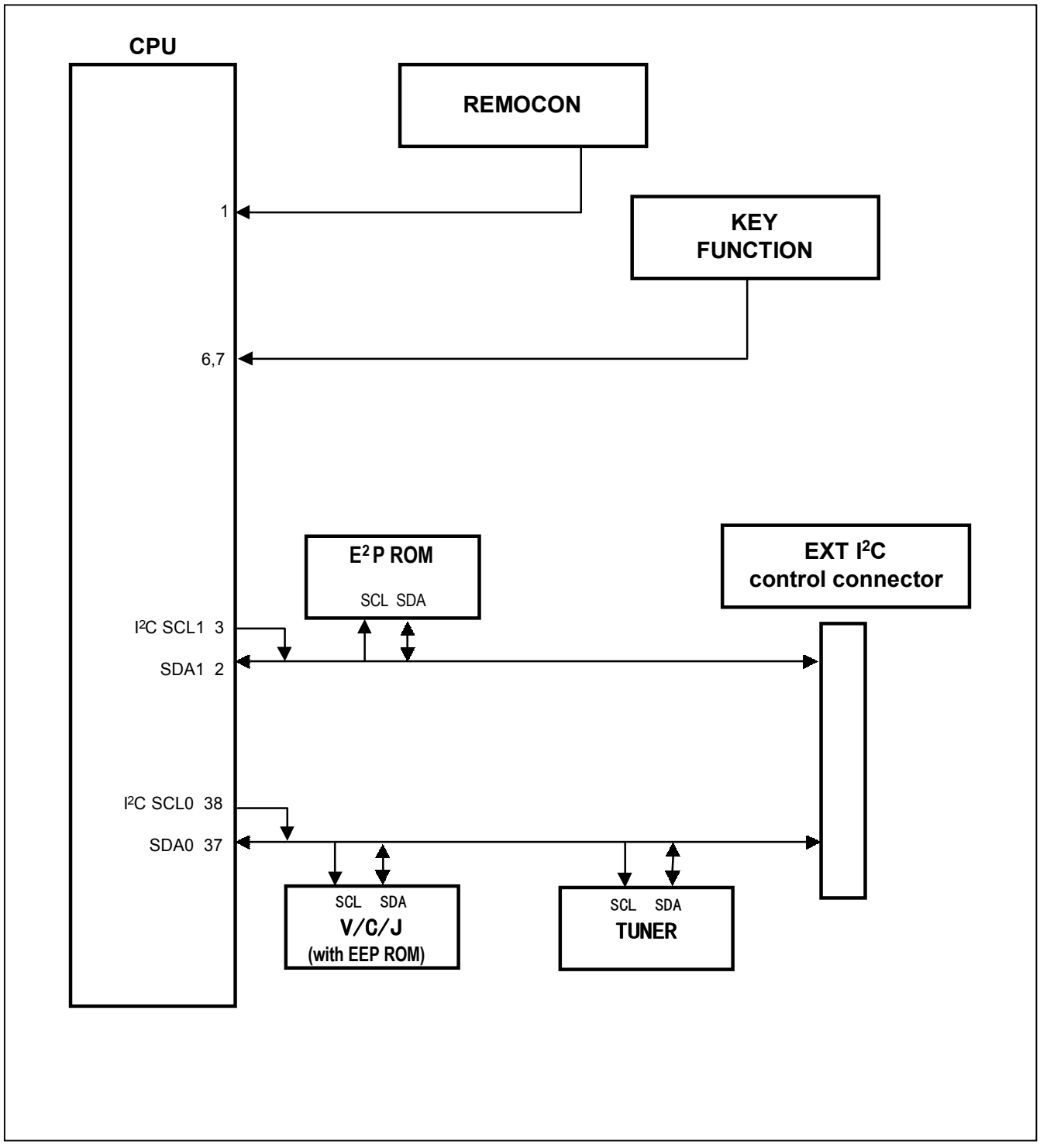
11. **High voltage hold down circuit check.** **For AV-A14M3(U)**
    After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.
    See item "**How to check the high voltage hold down circuit**".

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

FEATURES

- New chassis design enables use of an interactive on-screen control.
- Wide range voltage (110V～240V) AC power input.
- With AUDIO / VIDEO INPUT & OUTPUT terminal.
- MUTING button can reduce the audio level to zero instantly.
- Functional remote control to operate TV set (for channel select, volume control, power ON/OFF, etc.) from a distance.
- I²C bus control utilizes single chip ICs for IF, V/C, DEF. VSM PRESET, PRESET & TURBO TIMER.
- By means of AUTO PROGRAM, the TV stations can be selected automatically and the TV channels can also be rearranged automatically.
- Built -in ON TIMER, RETURN⁺ & CHILD LOCK.

■ SYSTEM BLOCK DIAGRAM



MODEL ID.(IDENTIFICATION) / MAIN DIFFERENCE LIST

MAIN DIFFERENCE LIST

⚠	Ref. No.	MODEL No. / Parts Name	AV-A14M3	AV-A14M3(-A)	AV-A14AU3	AV-A14T3
		MAIN PWB	SCG-1003A-H2	←	←	←
⚠		POWER CORD	QMP40D0-200J5	QMPR010-200-E2	QMP2980-185J5	QMP40D0-200J5
⚠		FRONT CABINET	LC10164-012A-H	←	LC10164-014A-H	LC10164-015A-H
⚠		RATING LABEL	LC20377-001A-H	LC20413-002A-H	LC20377-013A-H	LC20377-010A-H
⚠		INST. BOOK	LCT0650-001A-H	←	←	←
⚠		DIGEST MANUAL	LCT0651-001A-H	LCT0653-001A-H	—	LCT0652-001A-H
		PACKING CASE	CP11781-084-H	←	CP11781-095-H	CP11781-079-H
		WARRANTY CARD	—	—	BT-56001-2	—
		POS, SERIAL LABEL	CM47385-00B-H	←	←	←
		SERVICE CENTER LIST	—	—	BT-56002-2	—
		POWER KNOB	LC30348-001B-H	←	LC30348-002A-H	LC30348-001B-H
		CONTROL KNOB	LC30347-001C-H	←	LC30347-002A-H	LC30347-001C-H
		CONVERSION PLUG	—	QAM0055-001	—	—
		REC KEEPING CARD	—	—	—	—

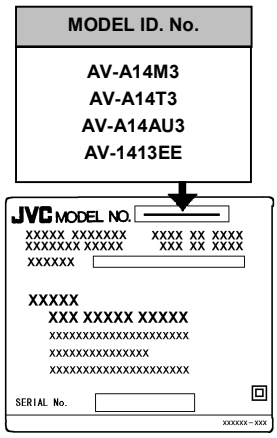
⚠	Ref. No.	MODEL No. / Parts Name	AV-A14T3(-A)	AV-A14M3(U)	AV-A14T3(HK)	AV-1413EE
		MAIN PWB	SCG-1003A-H2	SCG-1220A-H2	SCG-1222A-H2	←
⚠		POWER CORD	QMPR010-200-E2	QMP40D0-200J5	QMPN050-200-E2	QMP40D0-200J5
⚠		FRONT CABINET	LC10164-015A-H	LC10164-013A-H	LC10164-017A-H	LC10164-016A-H
⚠		RATING LABEL	LC20413-002A-H	LC20413-003A-H	LC20377-012A-H	LC20377-009A-H
⚠		INST. BOOK	LCT0650-001A-H	←	LCT0648-001A-H	LCT0647-001A-H
⚠		DIGEST MANUAL	LCT0653-001A-H	LCT0651-001A-H	—	—
		PACKING CASE	CP11781-074-H	CP11781-084-H	CP11781-074-H	CP11781-075-H
		WARRANTY CARD	—	—	—	BT-54012-1
		POS, SERIAL LABEL	CM47385-00B-H	—	CM47385-00B-H	←
		SERVICE CENTER LIST	—	—	—	—
		POWER KNOB	LC30348-001B-H	←	←	←
		CONTROL KNOB	LC30347-001C-H	←	←	←
		CONVERSION PLUG	QAM0055-001	—	—	—
		REC KEEPING CARD	—	CP30702-001	—	—

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

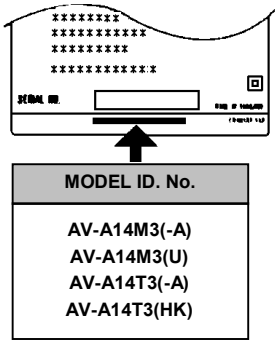
MODEL IDENTIFICATION

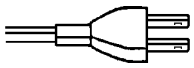
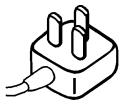
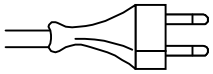
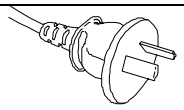
While referring to the illustration given below, identify each model No. on the rating label affixed to the rear cover of UNIT.

RATING LABEL



RATING LABEL



PIN TYPE	MODEL No.	SHAPE
FLAT TYPE PIN PLUG	AV-A14M3(-A) AV-A14T3(-A)	 QMPR010-200-E2
BF(UK) TYPE PIN PLUG	AV-A14T3(HK)	 QMPN050-200-E2
ROUND TYPE PIN PLUG	AV-A14M3 AV-A14M3(U) AV-A14T3/AV-1413EE	 QMP40D0-200J5
AU TYPE PIN PLUG	AV-A14AU3	 QMP2980-185J5

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the 5 screws marked Ⓐ and a screw marked Ⓑ as shown in Fig.1.
3. Withdraw the REAR COVER toward you.

[CAUTION]

- When reinstalling the rear cover, carefully push it inward after inserting the MAIN PWB into the rear cover groove.

REMOVING THE MAIN PW BOARD

- After removing the rear cover.

1. Slightly raise the both sides of the MAIN PW BOARD by hand and remove the PWB STOPPER under the MIAN PW BOARD from the FRONT CABINET.
2. Withdraw the MAIN PW BOARD backward . (If necessary, take off the wire clamp and connectors, etc.)

REMOVING THE SPEAKER

- After removing the rear cover.

1. By holding up the SPEAKER HOLDER marked Ⓒ slightly and unlocking the claw, the SPEAKER HOLDER can be removed. Then you can remove the SPEAKER.

CHECKING THE MAIN PW BOARD

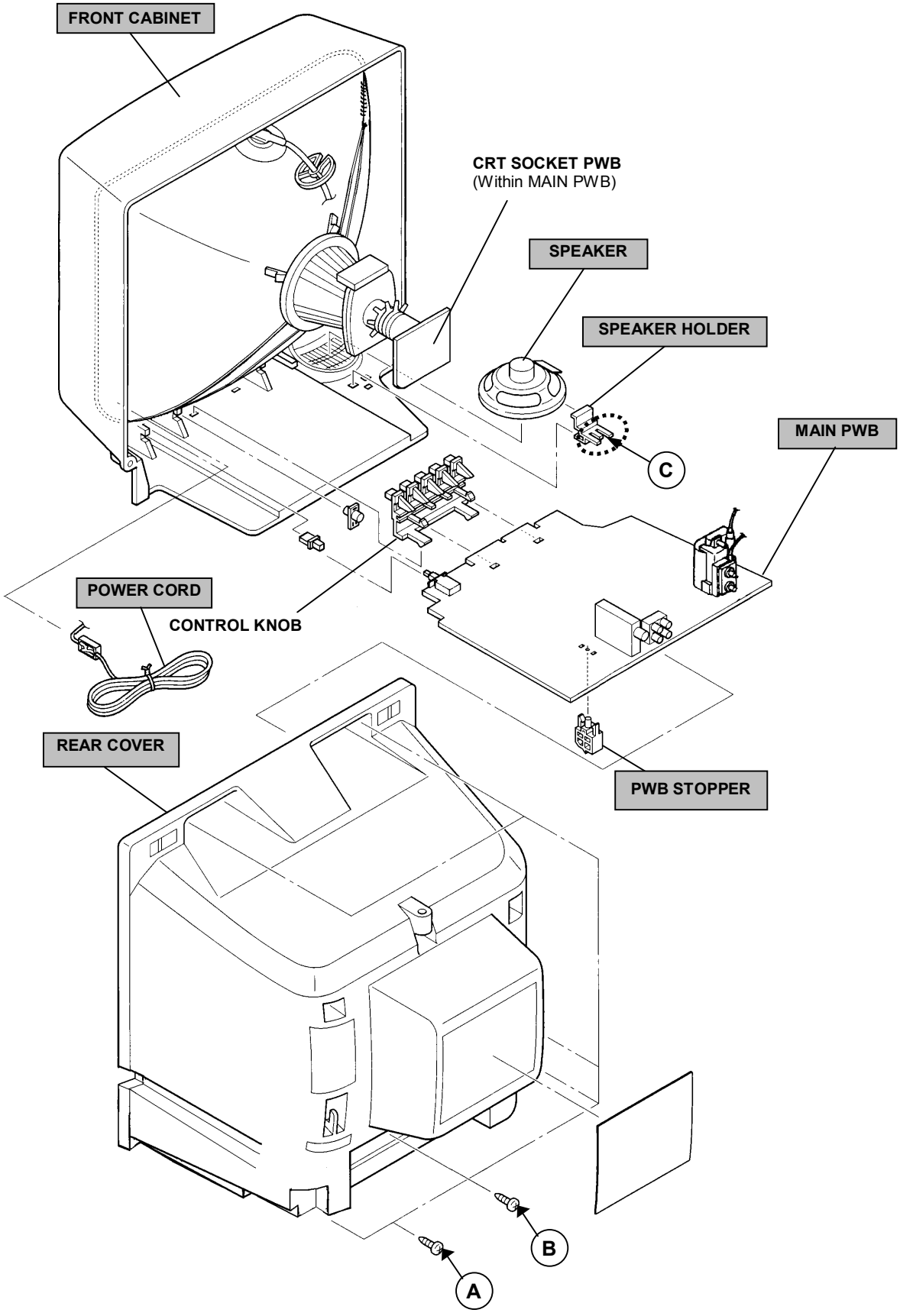
1. To check the backside of the MAIN PW Board.
   1) Pull out the MAIN PWB. (Refer to REMOVING THE MAIN PWB).
   2) Erect the chassis vertically so that you can easily check the backside of the MAIN PW Board.

[CAUTION]

- When erecting the MAIN PWB, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the CRT earth wire and other connectors are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.


FRONT CABINET
CRT SOCKET PWB
(Within MAIN PWB)
SPEAKER
SPEAKER HOLDER
MAIN PWB
C
POWER CORD
CONTROL KNOB
REAR COVER
PWB STOPPER
B
A

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

REPLACEMENT OF MEMORY ICs

1. MEMORY ICs

This model use memory ICs. In the memory ICs are memorized data for correctly operating the video and deflection circuits.
When replacing memory ICs, be sure to use ICs written with the initial values of data.

2. PROCEDURE FOR REPLACING MEMORY ICs

(1) Power off

Switch the power OFF and unplug the power cord from the wall outlet.

(2) Replace ICs

Be sure to use memory ICs written with the initial data values.

(3) Power on

Plug the power cord into the wall outlet and switch the power ON.

(4) Check and set SYSTEM CONSTANT SET:

- **It must not adjust without signal.**

1) Press the DISPLAY key and the PICTURE MODE key of the REMOTE CONTROL UNIT simultaneously.
2) The SERVICE MENU screen of Fig. 1 will be displayed.
3) While the SERVICE MENU on display, press the DISPLAY key and PICTURE MODE key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed
4) Check the setting value of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the MENU ▼/▲ key, and set the correct value with the MENU - / + key.
5) Press the DISPLAY key twice, and return to the normal screen.

(5) Receive channel of setting

Refer to the **OPERATING INSTRUCTIONS** and set the receive channels (channels preset) as described

(6) User Setting

Check the user setting value of Table 2, and if setting value is different, set the correct value.
For setting, refer to the **OPERATING INSTRUCTIONS**.

(7) Setting of SERVICE MENU

Verify the setting items of the SERVICE MENU of Table 3, and reset where necessary.
For setting, refer to the **SERVICE ADJUSTMENTS**.

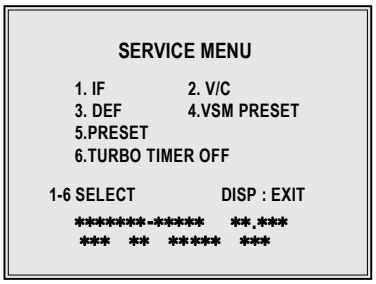


Fig. 1

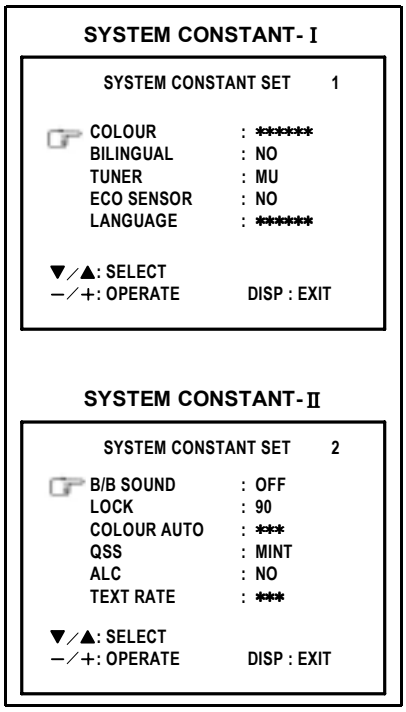
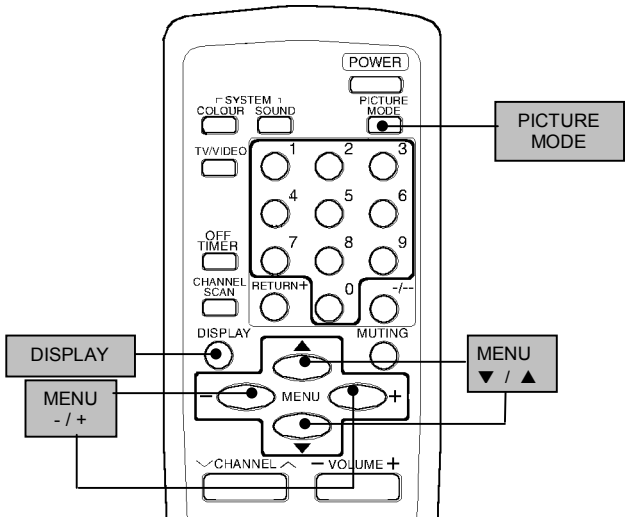


Fig.2

NAME OF REMOTE CONTROL KEY



SETTING OF SYSTEM CONSTANT SET

Setting item	Setting contents	Setting value							
		AV-A14M3	AV-A14M3(-A)	AV-A14M3(U)	AV-A14T3	AV-A14T3(-A)	AV-A14T3(HK)	AV-A14AU3	AV-1413EE
COLOUR	MULTI. → TRIPLE → PAL	MULTI	MULTI	MULTI	TRIPLE	TRIPLE	TRIPLE	TRIPLE	TRIPLE
BILINGUAL	YES → NO	NO	NO	NO	NO	NO	NO	NO	NO
TUNER	MU → MA	MU	MU	MU	MU	MU	MU	MU	MU
ECO SENSOR	YES → NO	NO	NO	NO	NO	NO	NO	NO	NO
LANGUAGE	E/R/A/F → E/A/F → E/F → E/A	E/R/A/F	E/R/A/F	E/R/A/F	E/R/A/F	E/R/A/F	E/C	E/R/A/F	E/R
B/B SOUND	ON → OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
LOCK	YES ↔ 10 ↔ 20 ↔ 250 ↔ 240 ↔ 230	90	90	90	90	90	90	90	90
COLOUR AUTO	YES → NO	NO	YES	NO	NO	YES	NO	NO	NO
QSS	MINT → MQSS	MINT	MINT	MINT	MINT	MINT	MINT	MINT	MINT
ALC	YES → NO	NO	NO	NO	NO	NO	NO	NO	NO
TEXT RATE	1 ↔ 10 ↔ 20 ↔ 40 ↔ 80	20	20	20	20	20	20	20	20

Table 1

USER SETTING VALUES (Setting of the last memory for shipment)

Setting item	Setting value	Setting item	Setting value
SUB POWER	ON	LANGUAGE	ENG.
CHANNEL POSITION	1 POSITION	CHANNEL PRESET	Refer to OPERATING INSTRUCTION
VOLUME	Appropriate sound volume	VNR	OFF
TV/VIDEO	TV	AUTO SHUTOFF	OFF
ON SCREEN DISPLAY	POSITION NUMBER DISPLAY	ON TIMER	PR1 0:00
COLOUR SYSTEM	AUTO PAL	BLUE BACK	OFF
SOUND SYSTEM	B / G	CHILD LOCK	OFF
OFF TIMER	OFF	ECO SENSOR	OFF
PICTURE MODE (VSM)	BRIGHT		

Table 2

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

INITIAL SETTING VALUE OF SERVICE MENU

1. **Adjustment of the SERVICE MENU is made on the basis of the initial setting values ; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.**
2. **Do not change the initial Setting Values of the Setting (Adjustment) items not listed In "ADJUSTMENT".**

- **INITIAL SETTING VAKUE of V/C**

Setting item \ Colour system		Variable range	Initial setting value			
			PAL	SECAM	NTSC 3.58	NTSC 4.43
1. CUT OFF	RED	-128～+127	-50	←	←	←
	GREEN					
	BLUE					
2. DRIVE	RED	-128～+127	+ 0	←	←	←
	BLUE					
3. BRIGHT		-127～+127	+ 0	←	←	←
4. CONT.		-63～+63	+ 0	←	←	←
5. COLOUR		-63～+63	+ 0	←	←	←
6. TINT	TV	-63～+63	——	——	+ 0	+ 0
	VIDEO		——	——	+ 0	+ 0
7. SECAM BL ADJ.		-31～+31	——	+ 0	——	——
8. SHARP(Do Not Adj.)	TV	-32～+31	- 15	←	←	←
	VIDEO		+15			

- **INITIAL SETTING VALUE of DEFLECTION**

Setting item	Variable range	Initial setting value	
		fv : 50Hz MODE	fv : 60Hz MODE
1. VER. POSITION	-04 ～ +03	+ 0	- 3
2. HOR. POSITION	-16 ～ +15	- 2	+ 7
3. VER. HEIGHT	-64 ～ +63	-24	- 2
4. VER. LINEARITY	-32 ～ +31	+13	- 5
5. VER. SCURVE	-32 ～ +31	-32	+ 0
6. HOR. VCO ADJUST	-63 ～ +62	+ 0	+ 0

- **SETTING VALUE OF VSM PRESET**

VSM preset mode / VSM Setting item	BRIGHT	STANDARD	SOFT
TINT SETTING VALUE	+15	←	←
COLOUR SETTING VALUE	+15	←	←
BRIGHT SETTING VALUE	+15	←	←
CONT. SETTING VALUE	+30	+15	+11
SHARP SETTING VALUE	+15	←	+12

PRESET ADJUSTMENT

- **The items in the following table, it is no requirement for adjustment.**
- **If values had changed by the miss operation, set the initial setting values in the following table.**

● **COLOUR SYSTEM** (DO NOT ADJUST)

Setting item		Initial setting value (Fixed value)			
		PAL	SECAM	NTSC 3.58	NTSC 4.43
1. C TRAP FIX		+ 1	←	←	←
2. SHARP PEAK		+ 0	←	—	—
3. ABL		+ 1	←	—	—
4. GAMMA		+ 0	←	←	←
5. Y. DELAY TIME	TV	+ 1	+ 2	←	+ 3
	VIDEO	+ 0	+ 2	+ 0	+ 2
6. BLACK EXP START		+ 3	←	←	←
7. C-BPF	TV	+ 1	←	+ 0	+ 0
	VIDEO	+ 1	←	+ 1	←
8. CW / SCP		+ 0	←	←	←
9. VIF DET LEVEL		+ 0	←	←	←
11. IF AGC MIN		+ 0	←	←	←
12. VIF AGC		+ 0	←	←	←
13. VIF PMOD		+ 0	←	←	←
19. VNR		+15	←	←	←
20. RGB LIM		+ 1	←	←	←
21. RGB LIMIT LEVEL		+ 2	←	←	←
23. TEXT H. POSITION		+ 5	←	←	←
24. READ DATA		—	—	—	—

● **SOUND SYSTEM** (DO NOT ADJUST)

Setting item	B/G	I	D/K	M
10. SIF DET LEVEL	+ 0	←	←	←
14. SIF BPF BW ADJUST	+ 0(-)	←	←	←
15. SIF TRAP FO ADJUST	+ 0(-)	←	←	←
16. SIF TRAP FO ADJUST 2	+ 0(-)	←	←	←
17. SIF TRAP	+ 0	←	←	←
18. SIF BPF	+ 1	+ 0	←	←
22. SIF SW	+ 1	+ 1	←	+ 0

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

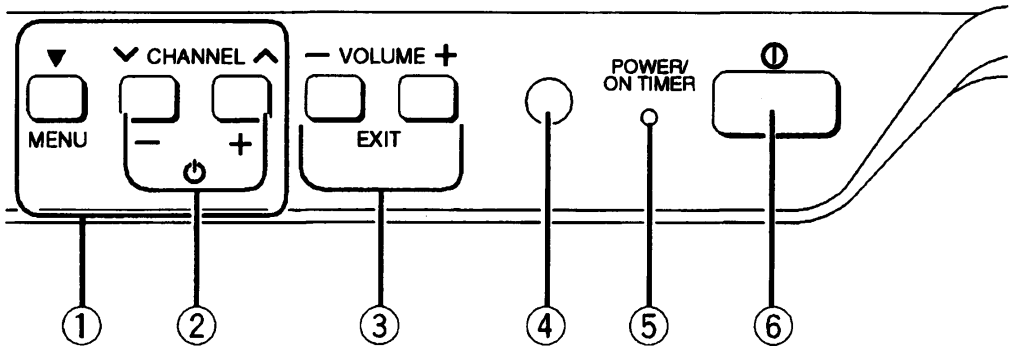
REPLACEMENT OF IC301 (IF V/C DECODER)

- **For the IC301(IF V/C DECODER) of this model, all data are written in the micro-computer. So, write the data in the micro-computer in accordance with the following procedures before starting adjustment.**

REPLACING PROCEDURES

(1) Turn the POWER OFF.
(2) Replace the IC301 with a new one.
(3) While pressing MENU button and VOL+ button ON the FRONT CABINET simultaneously, turn the POWER ON. When the POWER is turned ON, the data is written in the micro-computer immediately.

LOCATIONS OF FRONT PANEL BUTTONS AND LAMPS



① MENU (▼)
② CHANNEL∨/∧
③ VOLUME -/+
④ REMOTE CONTROL SENSOR
⑤ POWER / ON TIMER INDICATOR
⑥ POWER SWITH

SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. **There are 2 way of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.**
2. **The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**

✶ **For initial setting values not shown in each item of the adjustments, refer to the "INITIAL SETTING VALUE OF SERVICE MENU".**

3. Make sure that connection is correctly made to AC power source.
4. Turn on the power of the TV and measuring instrument for warming up for at least 30 minutes before staring adjustment.
5. If the receive or input signal is not specified, use the most appropriate signal for adjustment.
6. **Never touch parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.**
7. Preparation for user adjustment (presetting):
   Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

● **User setting position**

PICTURE MODE (VSM)	BRIGHT
VNR	OFF
TINT / COLOUR BRIGHT / CONT. / SHARP	CENTER
BLUE BACK	OFF
OFF TIMER	OFF
AUTO SHUTO OFF	OFF

MEASURING INSTRUMENT AND FIXTURES

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [PAL / SECAM / NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

Adjustment item	Adjustment item
B1 POWER SUPPLY	DEF. circuit adjustment
FOCUS adjustment	VSM PRESET setting
IF circuit adjustment	PRESET adjustment
V/C (Video / Chrom) circuit adjustment	PURITY, CONVERGENCE

BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

With the SERVICE MENU, various settings (adjustments) can be made, and they are broadly classified in the following items of settings :

- **1. IF** ····· This mode adjusts the setting values of the IF circuit.
- **2. V/C** ····· This mode adjusts the setting values of the VIDEO/CHROMA circuit.
- **3. DEF.** ····· This mode adjusts the setting value of the DEFLECTION circuit.
- **4. VSM PRESET** ····· For setting the values of STANDARD, SOFT and BRIGHT. (VSM : video status memory)
- **5. PRESET** ····· This mode adjusts the setting value of the RF circuit **(Do not adjust)**.
- **6. TURBO TIMER** ····· For quick setting the value of TIMER COUNT adjustable not only by minutes but also by second.
  (Should be OFF)
  ✶ If it is ON, the timer in TIMER mode changes from 1 minute into 1 sec temporarily.
  (It is easier to checks the Operation of TIMER)
  If you turn the TV power off, this setting becomes OFF automatically.

3. BASIC OPERATION OF SERVICE MENU

(1) How to enter SERVICE MENU

Press the DISPLAY key and the PICTURE MODE key of the REMOTE CONTROL UNIT simultaneously.
The SERVICE MENU screen of Fig. 1 will be displayed.

SERVICE MENU

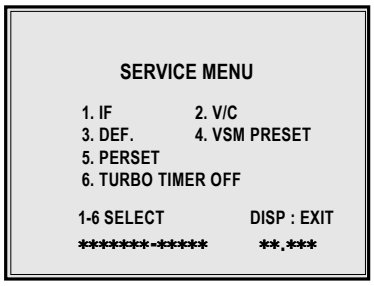


Fig. 1

(2) Selection of SUB MENU SCREEN

Press one of the keys 1 ～ 6 of the REMOTE CONTROL UNIT,
and select the SUB MENU SCREEN (See Fig.2) from the SERVICE MENU.

SERVICE MENU → SUB MENU **1. IF** **4.VSM PRESET**
2. V / C **5.PRESET**
3. DEF. **6.TURBO TIMER**

(3) Setting method of SERVICE MENU

- Once the setting values are set, they are memorized automatically.
- It must not adjust without signal.

1. IF

[1. VCO]

① 1 Key ····· Select **1. IF**.
② 1 Key ····· Select **1. VCO. (CW)**
③ The VCO(CW) screen will be displayed in yellow when the AFC voltage is at a certain level and in blue when it is at other levels.
④ DISPLAY Key ····· When this is pressed twice, you will return to the **SERVICE MENU**.

[2. DELAY POINT]

① 1 Key ····· Select **1. IF**.
② 2 Key ····· Select **2. DELAY POINT**.
③ MENU - / + Key ····· Set (adjust) the setting values of the setting items.
④ DISPLAY Key ····· When this is pressed twice, you will return to the **SERVICE MENU**.

2. V/C ,3. DEF. and 4. VSM PRESET

① 2,3, & 4 Keys ····· Select one from **2. V/C, 3.DEF. and 4. VSM PRESET**
② MENU ▽ / △ key ····· Select setting items.
③ MENU - / + Key ····· Set (adjust) the setting values of the setting items.
④ DISPLAY Key ····· When this is pressed, you will return to the **SERVICE MENU**.

5. PRESET (DO NOT ADJUST)

① 5 Keys ····· Select **5. PRESET.**
② MENU ▽ / △ key ····· Select setting item.
③ MENU - / + Key ····· Set (adjust) the setting values of the setting item.
④ DISPLAY Key ····· When this is pressed, you will return to the **SERVICE MENU**.

6. TURBO TIMER

① By pressing the 6-key, you can change the ON or OFF(should be **OFF**)

(4) Release of SERVICE MENU

After completing the setting, return to the SERVICE MENU, then again press the DISPLAY key.

SUB MENU SCREEN

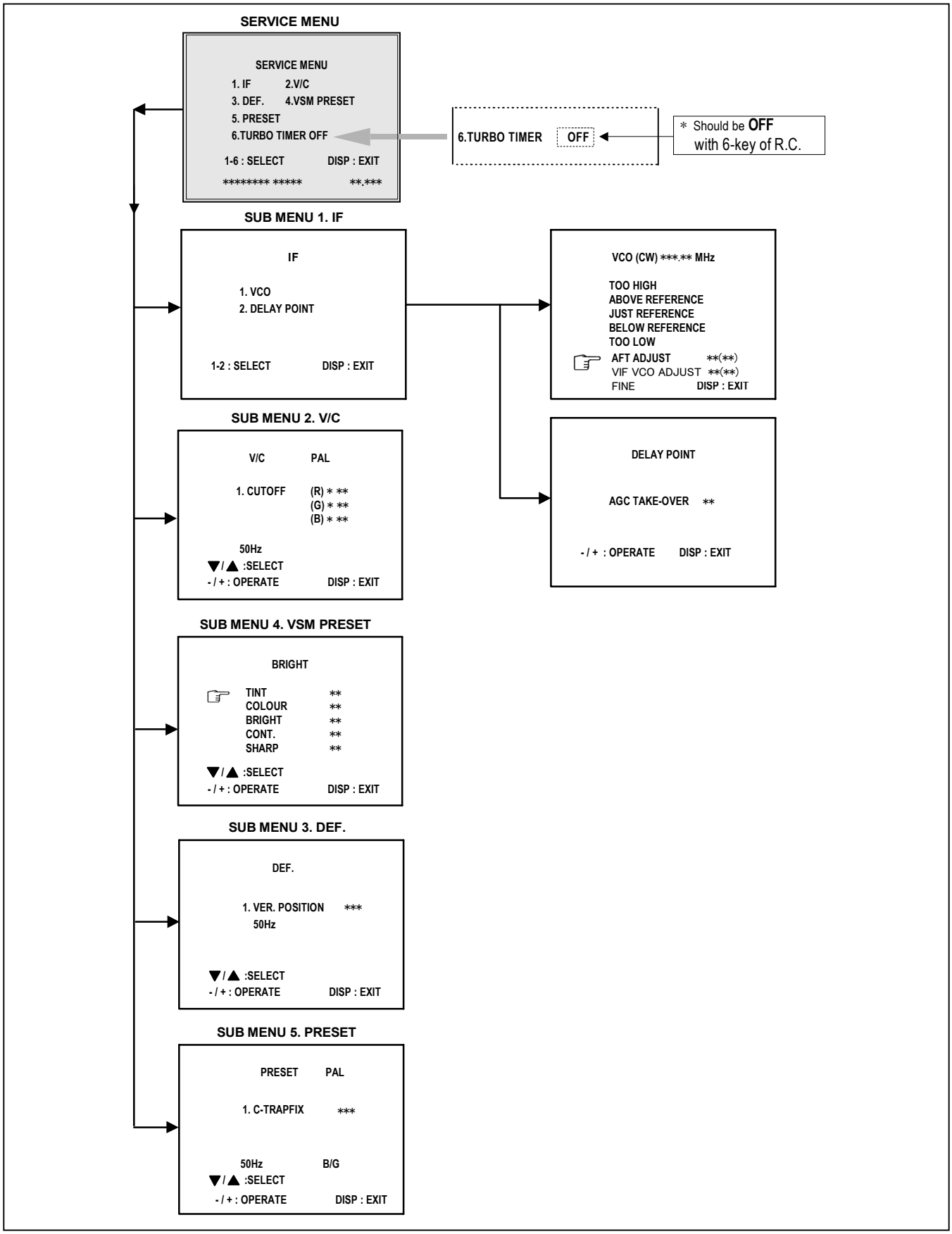
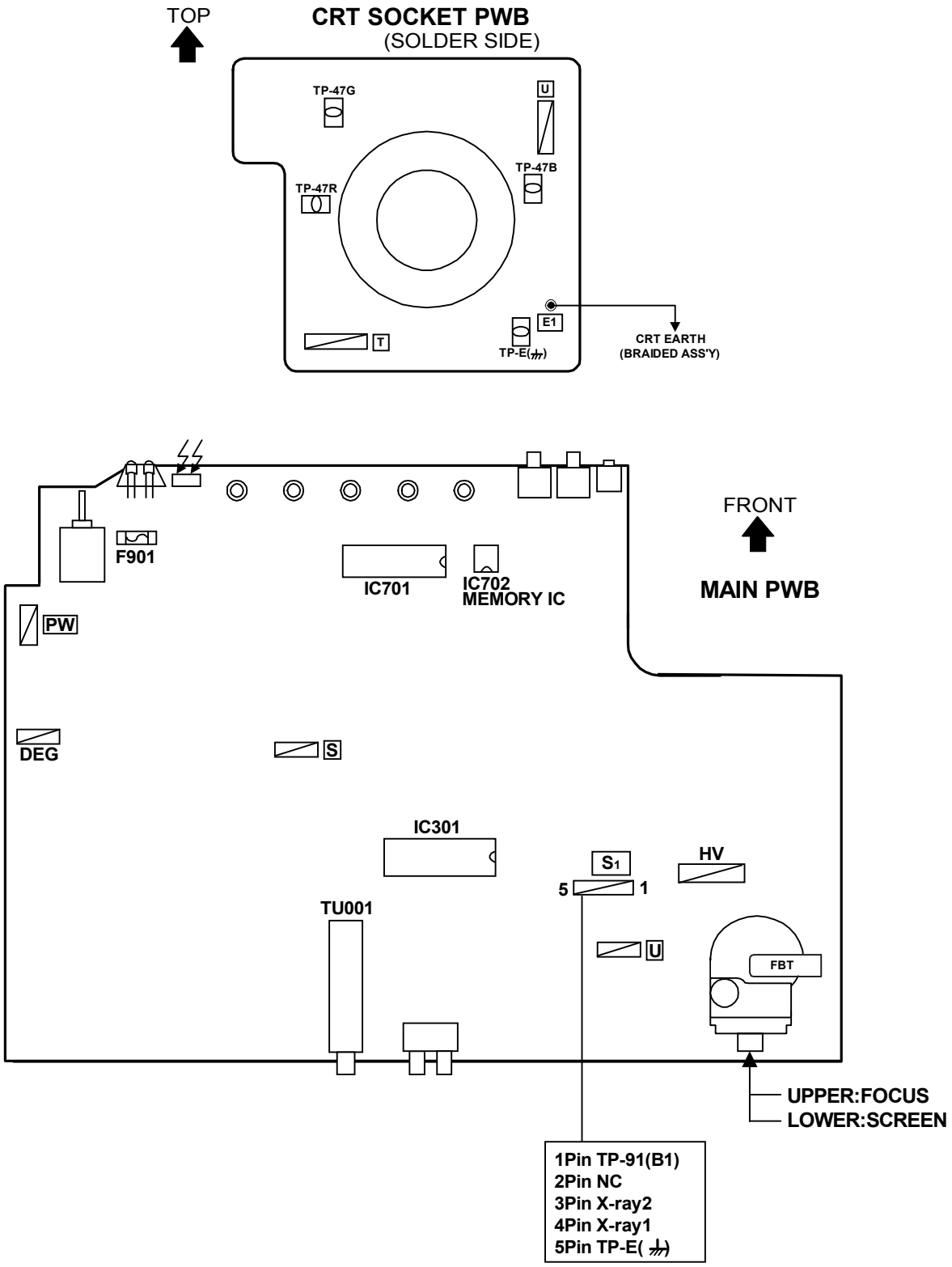


Fig. 2

ADJUSTMENT LOCATIONS



ADJUSTMENTS

✶ **For initial setting values not shown in each item of the adjustments, refer to the "INITIAL SETTING VALUE OF SERVICE MENU".**

B1 POWER SUPPLY

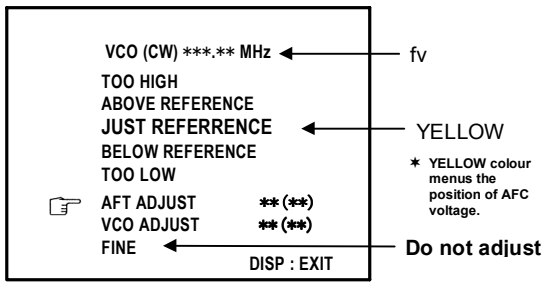
Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 Power Supply	**Signal generator** **DC Volt-meter**	**TP-91 (B1)** **TP-E (⏚)**		1. Receive a whole black signal. 2. Connect a DC voltmeter to TP-91(B1) and TP-E (⏚). 3. Make sure that the voltage is DC114.5±1.5V.

FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of FOCUS	**Signal generator**		**FOCUS VR [In FBT]**	1. Receive a cross-hatch signal. 2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 3. Make sure that when the screen is darkened, the lines remain in good focus.

IF CIRCUIT ADJUSTMENT

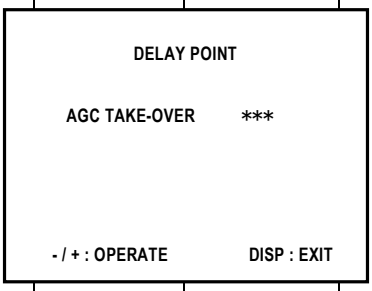
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of VCO(CW)	**Remote control unit**		**VCO(CW) TRANSF.**	✶ **It must not adjust without signal.** 1. Receive a COLOUR BAR SIGNAL(210.25MHz). 2. Select **1. IF** from the SERVICE MENU. 3. Press **1** key and select **1. VCO (CW)** to display **VCO (CW) SCREEN**. 4. Select **VCO ADJUST** with MENU ▼/▲ key and make sure that the set-up value is shown as +00. Then check the items 5 and 6 below. 5. With -/+ MENU key, change the value from +00 to -**01** and make sure that the colour of the characters **TOO LOW** changes to **YELLOW**. Then return the value to **+00**. 6. With -/+ MENU key, change the value from +00 to **+01** and make sure that the colour of the characters **TOO HIGH** changes to **YELLOW**. Then return the value to **+00**. 7. Select **AFT ADJUST** with MENU ▼/▲ key. Then press -/+ MENU key until the characters **JUST REFERENCE** changes from blue to **YELLOW**. 8. Press the DISPLAY key three times to return to normal screen. ◆ If you cannot check the colour change of the characters within the range of ±01 as explained in item 5 and 6 above, use the **±02** range for checking.



ADJUSTMENT ITEM	SET-UP VALUE
VCO ADJUST	+00(**)
AFT ADJUST	+00(**)

SET-UP VALUE

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of DELAY POINT (AGC)	**Remote control unit**		**DELAY POINT (AGC TAKE-OVER)**	1. Receive a black and white signal (colour off). 2. Select **1. IF** from the SERVICE MENU. 3. Select **2. DELAY POINT** by pressing the **2** key on the remote control. 4. Adjust the MENU - or + key until video noise disappears. 5. Turn to other channels and make sure that there are no irregularities.

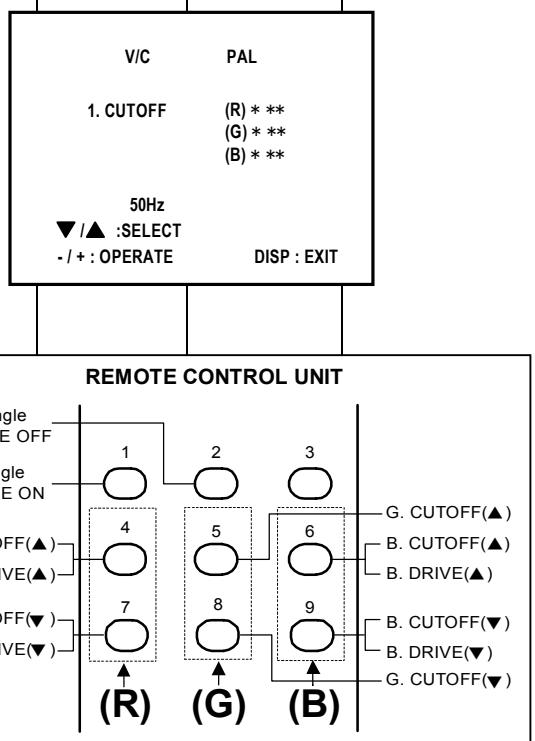


Setting (adjustment) item			Variable range	Initial setting value
AGC TAKE-OVER (DELAY POINT)	AV-A14M3(-A)	N.3.58	0～127	+51
	AV-A14M3(U)			
	AV-A14M3			
	OTHER MODELS	OTHERS		+48

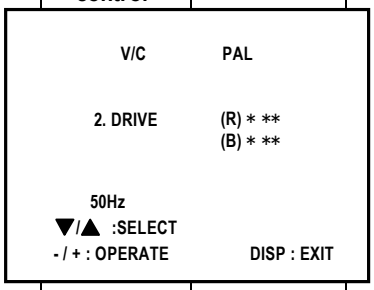
V / C CIRCUIT ADJUSTMENT

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- **Do not change the initial setting values of the setting items not listed in "ADJUSTMENT".**

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE (Low light)	● **Signal generator** ● **Remote control unit**		**1. CUT OFF (R)** **CUT OFF (G)** **CUT OFF (B)** **SCREEN VR (IN FBT)**	1. Receive a black and white signal (colour off). 2. From the SERVICE MENU, selct **2. V/C** to display **1. CUT OFF (R)**, **(G)** and **(B)** . 3. Set each value to initial setting value with **4～9** keys of the remote control unit. 4. Press the **1** key of the remote control unit to produce a single horizontal line. 5. Turn the **SCREEN VR** fully counter-clockwise, then slowly turn it clockwise to where a red, blue and green colour is faintly visible. 6. Use keys **4～9** of the remote control unit and adjust the other 2 colours to where the single horizontal line appears white. 7. Turn the **SCREEN VR** to where the single horizontal line glows faintly. 8. Press the **2** key to return to **1. CUT OFF** screen. 9. Press the DISPLAY key twice to return to the normal screen.
Adjustment of WHITE BALANCE (High light)	● **Signal generator** ● **Remote control**		**2. DRIVE (R)** **DRIVE (B)**	1. Receive a black and white signal (colour off). 2. From the SERVICE MENU, selct **2. V/C**. 3. Select **2. DRIVE (R) / (B)** with MENU ▼/▲key, and set each value to initial setting value with **4** and **7** or **6** and **9** keys of the remote control unit. 4. Use the keys **4** and **7** or **6** and **9** to produce a white screen 5. Press the DISPLAY key twice to return to the nomal screen.



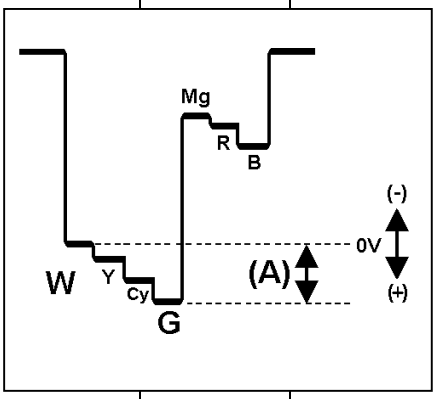
Setting (Adjustment) item		Variable range	Initial setting value
1. CUT OFF	R	-128～+127	-50
	G	-128～+127	-50
	B	-128～+127	-50



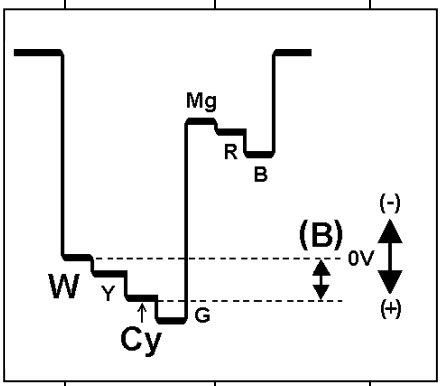
Setting (Adjustment) item		Variable range	Initial setting value
2. DRIVE	R	-128～+127	+ 0
	B	-128～+127	+ 0

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB BRIGHT	● **Remote control unit**		**3. BRIGHT**	1. Receive any broadcast. 2. Select **2. V/C** from SERVICE MENU. 3. Select **3. BRIGHT** with the MENU ▼/▲ key. 4. Set the initial setting value with the MENU - or + key. 5. If the brightness is not the best with the initial set value, make fine adjustment until you get the best brightness.
Adjustment of SUB CONT.	● **Remote control unit**		**4. CONT.**	1. Receive any broadcast. 2. Select **2. V/C** from SERVICE MENU. 3. Select **4. CONT**. with the MENU ▼/▲ key. 4. Set the initial setting value with the MENU - or + key. 5. If the contrast is not the best with the initial set value, make fine adjustment until you get the best contrast.
Adjustment of SUB COLOUR	● **Remote control unit**		**5. COLOUR**	**[Method of adjustment without measuring instrument]**
			PAL COLOUR	**(PAL COLOUR)** 1. Receive a PAL broadcast. 2. Select **2. V/C** from the SERVICE MENU. 3. Select **5. COLOUR** with the MENU ▼/▲ key. 4. Set the initial setting value for PAL COLOUR with the MENU - or + key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour.
			SECAM COLOUR	**(SECAM COLOUR)** 1. Receive a SECAM broadcast. 2. Make fine adjustment of SECAM COLOUR as previously.
			NTSC 3.58 COLOUR	**(NTSC 3.58 COLOUR)** 1. Receive (RF or VIDEO terminal) a NTSC 3.58 full field colour bar signal (75% white). 2. Make similar fine adjustment of NTSC 3.58 COLOUR as previously.
				(NTSC 4.43 COLOUR) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR Ⅱ	● **Signal generator** ● **Oscillo-scope** ● **Remote control unit**	**TP-47G / B** **TP-E (⏚)** **[CRT SOCKET PWB]**	**5. COLOUR**	**[Method of adjustment using measuring instrument]**
			PAL COLOUR	**(PAL COLOUR)** 1. Receive a PAL full field colour bar signal (75% white). 2. Select **2. V/C** from SERVICE MENU. 3. Select **5. COLOUR** with the MENU ▼/▲ key. 4. Set the initial setting value of PAL COLOUR with the MENU - or + key. 5. Connect the oscilloscope between TP-47G and TP-E. 6. Adjust PAL COLOUR to bring the value of **(A)** in the illustration to **+9V (W&G)**.
			SECAM COLOUR	**(SECAM COLOUR)** 1. Receive a SECAM full field colour bar signal (75% white). 2. Set the initial setting value of SECAM COLOUR with the MENU - or + key. 3. Adjust SECAM COLOUR to bring the value of **(A)** in the illustration to **+3V (W & G)**.
			NTSC 3.58 COLOUR	**(NTSC 3.58 COLOUR)** 1. At RF or video terminal, receive a NTSC 3.58 full field colour bar signal (75% white). 2. Set the initial setting value of NTSC 3.58 COLOUR with the MENU - or + key. 3. Adjust NTSC 3.58 COLOUR to bring the value of **(A)** in the illustration to **+7V (W & G)**.
				(NTSC 4.43 COLOUR) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

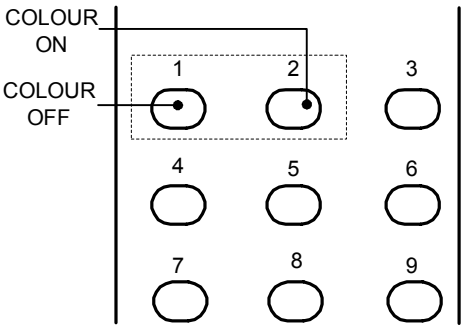


Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of TINT Ⅰ	● **Remote control unit**		**6. TINT**	**[Method of adjustment without measuring instrument]**
			NTSC 3.58 TINT	**(NTSC 3.58 TINT)** 1. At RF or video terminal, receive a NTSC 3.58 video colour bar signal full field colour bar signal (75% white). 2. Select **2. V/C** from SERVICE MENU. 3. Select **6. TINT** with the MENU ▼/▲ key. 4. Set the initial setting value of NTSC 3.58 with the MENU - or + key. 5. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint.
				(NTSC 4.43 COLOUR) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.
Adjustment of TINT Ⅱ	● **Signal generator** ● **Oscillo-scope** ● **Remote control unit**	**TP-47G / B** **TP-E (⏚)** **[CRT SOCKET PWB]**	**6. TINT**	**[Method of adjustment using measuring instrument]**
			NTSC 3.58 TINT	**(NTSC 3.58 TINT)** 1. At RF or video terminal, receive a NTSC 3.58 full field video colour bar signal(75% white). 2. Select **2. V/C** from SERVICE MENU. 3. Select **6. TINT** with the MENU ▼/▲ key. 4. Set the initial setting value of NTSC 3.58 with the MENU - or + key. 5. Connect the oscilloscope between TP-47G and TP-E. 6. Adjust NTSC 3.58 TINT to bring the value of **(B)** in the illustration to **+5V (W & Cy)**.
				(NTSC 4.43 TINT) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment Of SECAM BL (BLACK OFFSET)	● **Remote control unit** ● **Signal generator**		**7. SECAM BL ADJUST**	**[Method of adjustment using measuring instrument]** 1. Receive a SECAM HALF COLOUR BAR signal (210.25MHz). 2. Select **2. V/C** from SERVICE MENU. 3. Select **7. SECAM BL ADJUST** with ▼/▲MENU key. 4. Set the initial setting value with the – or + MENU key. 5. Switch the ①key (colour OFF) and ②key (colour ON) on the remote control and make sure that there is no colour on the black and white screen. 6. If the black and white screen is not best with the initial setting value, make fine adjustment until you get the best black and white screen. 7. Press the DISPLAY key twice to return to the normal screen.

REMOTE CONTROL UNIT



DEFLECTION CIRCUIT ADJUSTMENT

- There are 2 modes of adjustment (setting value) ------ fv : 50Hz mode and fv : 60Hz mode ----- depending upon the kind of signals (vertical frequency 50Hz / 60Hz).
- When adjusted in fv : 50Hz mode, fv : 60Hz mode will be automatically set.

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of V.HEIGHT &V. POSITION	● **Remote control unit**		**1. VER. POSITION** **3. VER. HEIGHT**	**[fv : 50Hz mode]** 1. Receive a cross-hatch signal. 2. Select **3. DEF.** from SERVICE MENU. 3. Select **1. VER. POSITION** with the MENU ▲/▼ key. 4. Set the initial setting value with the MENU - / + key. 5. Adjust **VER. POSITION** and adjust it to be vertical center as shown in Fig.2, with the MENU - / + key. 6. Select **3. VER. HEIGHT** with the MENU key. 7. Set the initial setting value with the MENU - / + key. 8. Adjust **VER. HEIGHT** and make the vertical screen size **92%** of the picture size as shown in Fig. 1with the MENU - / + keys of remote control unit.
Adjustment of HOR. POSITION	● **Remote control unit**		**2. HOR. POSITION**	9. Receive a circle pattern signal. 10. Select **2. HOR POSITION** with the MENU ▲/▼ key. 11. Set the initial setting value of **2. HOR. POSITION** with the MENU - / + key. 12. Adjust **2. HOR. POSITION** to make **H=H"** as shown in Fig.2 with the MENU - / + key.

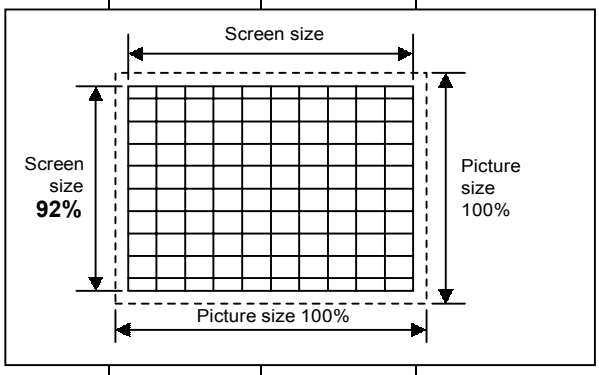


Fig.1

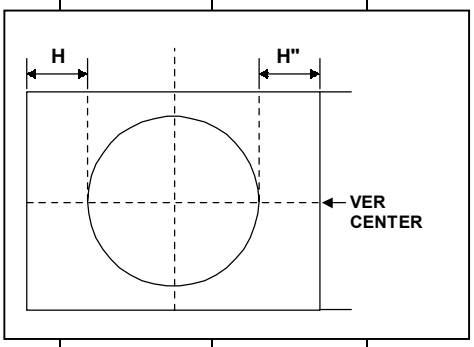


Fig.2

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of VER. LIN. & VER. SCURVE	● **Remote control unit**		**4. VER. LIN.** **5. VER. SCURVE**	● **When the vertical linearity is too bad, Perform the following steps.** 13. Receive a cross-hatch signal. 14. Select **4. VER. LIN.** with the MENU ▲/▼ key. 15. Set the initial setting value of **4. VER. LIN.** with the MENU - / + key. 16. Select **5. VER. SCURVE** with the MENU ▲/▼ key. 17. Set the initial setting value of **5. VER. SCURVE** with the MENU - / + key. 18. Adjust **4. VER. LIN.** and **5. VER. SCURVE** so that the spaces of each line as shown in Fig.3 on **TOP**, **CENTER** and **BOTTOM** become uniform.
				19. Make sure that the adjustment is properly done on the screen of 60Hz mode. **[NOTE]** ● Adjust to make both 50Hz & 60Hz are the same v. size and fine straight line. ● When adjust again, adjust 50Hz mode first. ● When adjust in 60Hz mode, only 60Hz mode is adjust. ● Ver, linearity adjustment is only time adjustment.

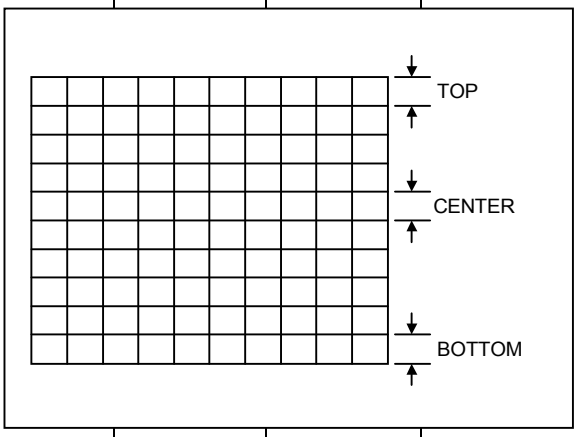
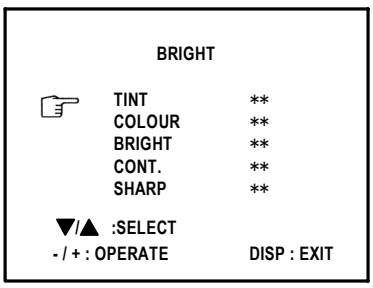


Fig.3

VSM PRESET ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of VSM PRESET	● **Remote control unit**		**TINT** **COLOUR** **BRIGHT** **CONT.** **SHARP**	(VSM PRESET) 1. Select **4. VSM PRESET** from the SERVICE MENU. 2. Select BRIGHT with the PICTURE MODE key. 3. Adjust the MENU ▲/▼ and MENU - or + key to bring the set values of **TINT ～ SHARP** to the values shown in the table. 4. Respectively select the VSM PRESET mode for SOFT and STANDARD, and make similar adjustment as in 3. above.



AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

For AV-A14M3(U)

HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.
This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

(1) Turn the POWER SW ON.
(2) As shown in Fig.1, set the resistor (between [S1] connector [3] & [4]).
(3) Make sure that the screen picture disappears.
(4) Temporarily unplug the power cord.
(5) Remove the resistor (between [S1] connector [3] & [4]).
(6) Again plug the power cord, make sure that the normal picture is displayed on the screen.

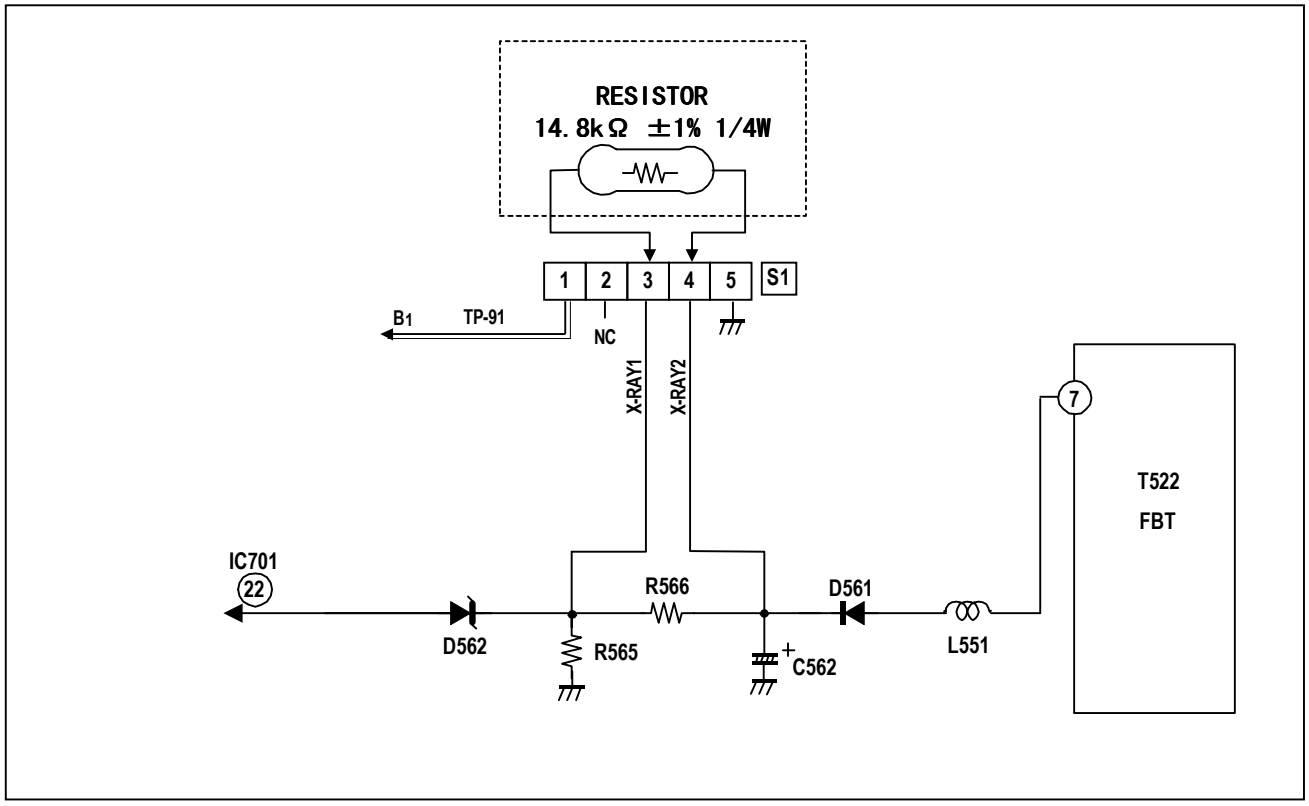
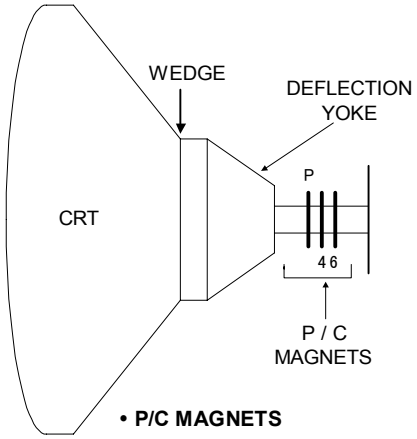


Fig. 1

PURITY, CONVERGENCE ADJUSTMENT

PURITY ADJUSTMENT

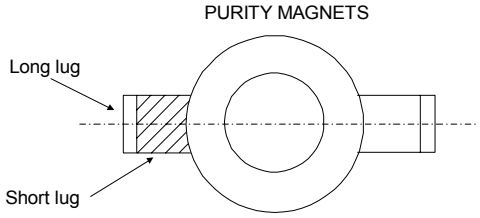
1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a crosshatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• P/C MAGNETS

P : PURITY MAGNET
4 : 4 POLES (convergence magnets)
6 : 6 POLES (convergence magnets)

Fig.1



Bring the long lug over the short lug and position them horizontally.

Fig.2

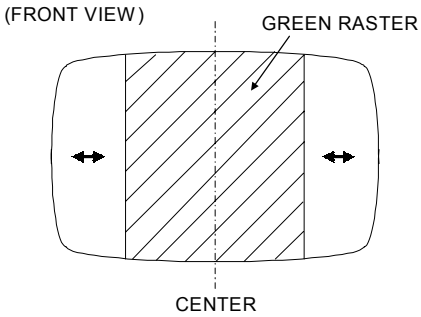


Fig.3

STATIC CONVERGENCE ADJUSTMENT

1. Input a crosshatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta(red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

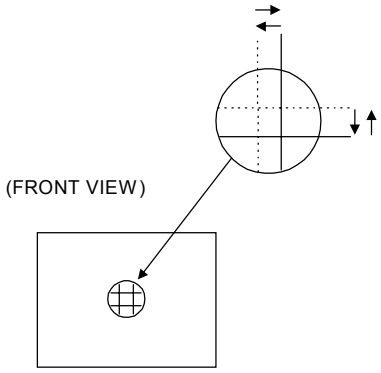


Fig.1

DYNAMIC CONVERGENCE ADJUSTMENT

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
3. Repeat 1 and 2 above, and make best convergence.

(FRONT VIEW)

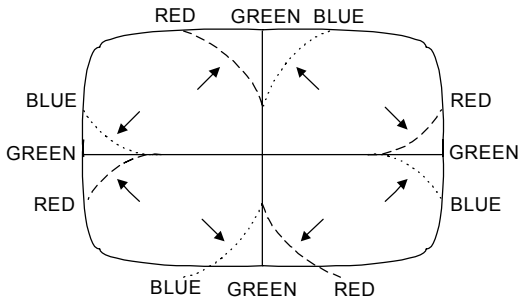


Fig.2

- After adjustment, fix the wedge at the original position.
  Fasten the retainer screw of the deflection yoke.
  Fix the 6 magnets with glue.

(FRONT VIEW)

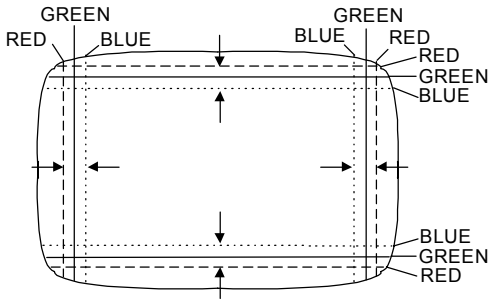


Fig.3

SELF CHECK FUNCTIONS

1. Outline

This model has self check functions given below. When an abnormality has been detected, the SUB POWER is turned OFF and the LED flashes to inform of the failure. An abnormality is detected by the signal input state of the control line connected to the microcomputer.

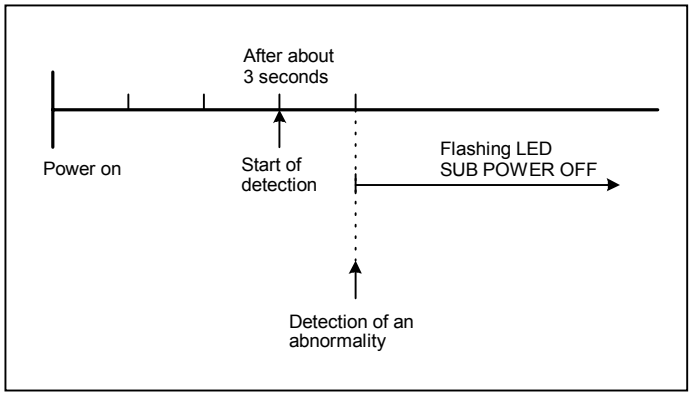
2. Self check items

Check item	Details of detection	Method of detection	State of abnormality
Over-current protection	An over-current on the LOW-B line is detected.	The main microcomputer detects the possible abnormality at 20-msec. intervals and judges the results in every 24 time. Of the 24 times, if NG is detected more than 13 times, it is judged that there is an abnormality	When an abnormality has been detected, the SUB-POWER is turned off. While the SUB-POWER is being turned off, the power key of the remote controller is not operational until the power plug is taken out and put in again.
CRT NECK protection	Operation of Vertical deflection circuit.	DITTO	DITTO

3. Self check indicating function

At about 3 seconds after the power is turned ON, the self-check function starts.

In case where an abnormality has been detected, the OFF TIMER LED flashes, and the SUB-POWER is turned OFF.



[Indication by LED]

Item	LED flashing intervals
Over-current protection CRT NECK protection	Turning on and off (0.24-second) intervals

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

CONTENTS

■ USING P.W. BOARD & REMOTE CONTROL UNIT ····· 33

■ REMOTE CONTROL UNIT PARTS LIST ····· 33

■ EXPLODED VIEW PARTS LIST ····· 34

■ EXPLODED VIEW ····· 35

■ PRINTED WIRING BOARD PARTS LIST

AV-A14M3 / AV-A14M3(-A) / AV-A14T3 / AV-A14T3(-A) / AV-A14AU3

- MAIN PW BOARD ASS'Y (With CRT SOCKET PWB) ····· 36

AV-A14T3(HK) / AV-1413EE

- MAIN PW BOARD ASS'Y (With CRT SOCKET PWB) ····· 40

AV-A14M3(U)

- MAIN PW BOARD ASS'Y (With CRT SOCKET PWB) ····· 44

■ PACKING ····· 48

■ PACKING PARTS LIST ····· 48

USING P.W. BOARD & REMOTE CONTROL UNIT

Model / P.W.B ASS'Y	AV-A14M3	AV-A14M3(-A)	AV-A14T3	AV-A14T3(-A)
MAIN P.W.B	SCG-1003A-H2	←	←	←
REMOTE CONTROL UNIT	RM-C360-1H	←	←	←

Model / P.W.B ASS'Y	AV-A14AU3	AV-A14T3(HK)	AV-1413EE	AV-A14M3(U)
MAIN P.W.B	SCG-1003A-H2	SCG-1222A-H2	←	SCG-1220A-H2
REMOTE CONTROL UNIT	RM-C360-1H	←	←	←

REMOTE CONTROL UNIT PARTS LIST (RM-C360-1H)

⚠ Ref.No.	Part No.	Part Name	Description	Local
	25-0068 B	BATTERY COVER		

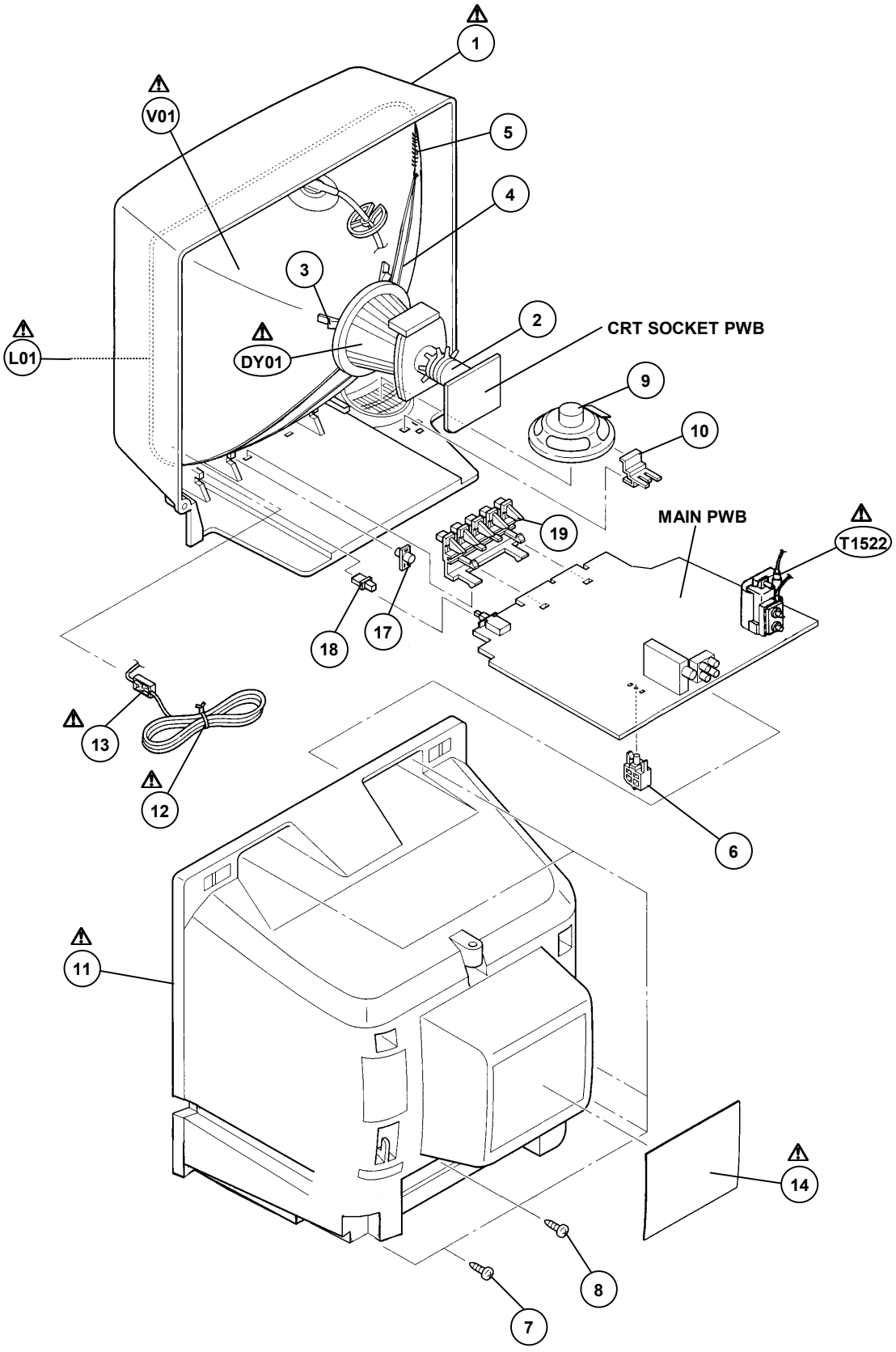
EXPLODED VIEW PARTS LIST

AV-A14M3 / AV-A14M3(-A) / AV-A14M3(U) / AV-A14T3
AV-A14T3(-A) / AV-A14T3(HK) / AV-1413EE / AV-A14AU3

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	V01	A34AGT15X	PICTURE TUBE(C)		
⚠	DY01	CJ28325-00A	DEFLECTION YOKE		
⚠	L01	CELD025-005J6	DEGAUSSING COIL		
⚠	T1522	QQH0058-001	FBT		
⚠	1	LC10164-012A-H	FRONT CABINET	AV-A14M3 / AV-A14M3(-A)	
⚠	1	LC10164-015A-H	FRONT CABINET	AV-A14T3 / AV-A14T3(-A)	
⚠	1	LC10164-014A-H	FRONT CABINET	AV-A14AU3	
⚠	1	LC10164-017A-H	FRONT CABINET	AV-A14T3(HK)	
⚠	1	LC10164-016A-H	FRONT CABINET	AV-1413EE	
⚠	1	LC10164-013A-H	FRONT CABINET	AV-A14M3(U)	
	2	CE40305-00B	P.C.MAGNET		
	3	CE42153-00AJ1	WEDGE	(×3)	
	4	CHGB0016-0A	BRAIDED WIRE		
	5	A48457-3-H	SPRING		
	6	CM48144-002-H	P.W.B.STOPPER		
	7	QYSBSFG4016Z	TAPPING SCREW	(×5)	
	8	QYSBSF3010Z	TAPPING SCREW		
	9	QAS0016-001	SPEAKER		
⚠	9	QAS0016-001	SPEAKER	AV-A14M3(U)	
	10	LC30345-001A-H	SP HOLDER		
⚠	11	LC10165-001C-H	REAR COVER		
⚠	12	QMP40D0-200J5	POWER CORD	AV-A14M3/AV-A14T3/AV-A14M3(U)/AV-1413EE	
⚠	12	QMPR010-200-E2	POWER CORD	AV-A14M3(-A)/AV-A14T3(-A)	
⚠	12	QMPN050-200-E2	POWER CORD	AV-A14T3(HK)	
⚠	12	QMP2980-185J5	POWER CORD	AV-A14AU3	
⚠	13	CM4700S-A01-H	CORD CLAMP		
⚠	14	LC20377-001A-H	RATING LABEL	AV-A14M3	
⚠	14	LC20413-002A-H	RATING LABEL	AV-A14M3(-A) / AV-A14T3(-A)	
⚠	14	LC20377-013A-H	RATING LABEL	AV-A14AU3	
⚠	14	LC20377-010A-H	RATING LABEL	AV-A14T3	
⚠	14	LC20377-012A-H	RATING LABEL	AV-A14T3(HK)	
⚠	14	LC20377-009A-H	RATING LABEL	AV-1413EE	
⚠	14	LC20413-003A-H	RATING LABEL	AV-A14M3(U)	
	17	LC30346-001B-H	REMOCON LENS		
	18	LC30348-001B-H	POWER KNOB	AV-A14T3(-A)/AV-A14T3(HK)/AV-1413EE AV-A14M3/AV-A14M3(-A)/AV-A14M3(U)/AV-A14T3	
	18	LC30348-002A-H	POWER KNOB	AV-A14AU3	
	19	LC30347-001C-H	CONTROL KNOB	AV-A14T3(-A)/AV-A14T3(HK)/AV-1413EE AV-A14M3/AV-A14M3(-A)/AV-A14M3(U)/AV-A14T3	
	19	LC30347-002A-H	CONTROL KNOB	AV-A14AU3	

AV-A14M3 / AV-A14M3(-A) / AV-A14M3(U) / AV-A14T3
AV-A14T3(-A) / AV-A14T3(HK) / AV-1413EE / AV-A14AU3

EXPLODED VIEW



AV-A14M3/AV-A14M3(-A)/AV-A14T3/AV-A14T3(-A)/AV-A14AU3

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SCG-1003A-H2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1002-03	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1004	NRSA02J-224X	MG R	220kΩ 1/10W	J
	R1102	NRSA02J-750X	MG R	75Ω 1/10W	J
	R1103	NRSA02J-100X	MG R	10Ω 1/10W	J
	R1109	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1110	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1111	NRSA02J-181X	MG R	180Ω 1/10W	J
	R1112	NRSA02J-100X	MG R	10Ω 1/10W	J
	R1113	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1114	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1115	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1117	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1118	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1120	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1121	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1159	NRSA02J-184X	MG R	180kΩ 1/10W	J
	R1161	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1162	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1163	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1164	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1165	NRSA02J-220X	MG R	22Ω 1/10W	J
	R1166	NRSA02J-821X	MG R	820Ω 1/10W	J
	R1301	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1302	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1303-05	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1306	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1307	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1308	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1312	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1313-14	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1321	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1322	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1323	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1324	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1326	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1327	NRSA02J-475X	MG R	4.7MΩ 1/10W	J
	R1341	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1345-46	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1347	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1353	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1354-56	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1357-59	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1360-62	QRZ0107-152Z	C R	1500Ω 1/2W	K
	R1363-65	QRL029J-123	OM R	12kΩ 2W	J
	R1366-68	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1369	QRE121J-394Y	C R	390kΩ 1/2W	J
	R1372	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1373	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1374	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1401	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1421-22	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1423	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1424	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1425	NRSA02J-471X	MG R	470Ω 1/10W	J
	R1426	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1429	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1430	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1431	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1432-33	QRE121J-3R9Y	C R	3.9Ω 1/2W	J
	R1436	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1440	QRE121J-561Y	C R	560Ω 1/2W	J
	R1441	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1442	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
	R1453	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1501	QRE121J-181Y	C R	180Ω 1/2W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1502	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1503	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1521	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1522	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1524	QRL03EJ-560X	OM R	56Ω 3W	J
	R1526	QRE121J-270Y	C R	27Ω 1/2W	J
	R1529	QRG029J-820	OM R	82 Ω 2W	J
	R1531	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1533-34	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
⚠	R1551	QRZ9011-1R0	F R	1 Ω 1/2W	J
	R1552	QRJ146J-2R2X	C R	2.2Ω 1/4W	J
	R1554	QRE121J-182Y	C R	1.8kΩ 1/2W	J
	R1571	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1573-74	QRT02EJ-2R2X	MF R	2.2Ω 2W	J
	R1576	QRE121J-223Y	C R	22kΩ 1/2W	J
	R1577	NRSA02J-562X	MG R	5.6kΩ 1/10W	J
	R1578	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1581	QRE121J-182Y	C R	1.8kΩ 1/2W	J
	R1582	NRSA02J-273X	MG R	27kΩ 1/10W	J
	R1583	NRSA02J-393X	MG R	39kΩ 1/10W	J
	R1651	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1652	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1653	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
	R1654	QRX029J-4R7	MF R	4.7Ω 2W	J
	R1656	NRSA02J-123X	MG R	12kΩ 1/10W	J
	R1657	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1658-59	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1660	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1661-62	QRE121J-271Y	C R	270Ω 1/2W	J
	R1664	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1665	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1704-05	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1706-07	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1708	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1709-14	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1715-16	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1717	NRSA02J-273X	MG R	27kΩ 1/10W	J
	R1718	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1719	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1720	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1721	NRSA02J-103X	MG R	10kΩ 1/10W	J
⚠	R1723	QRZ9023-270	F R	27 Ω 2W	J
	R1724	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1725	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1726	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1727	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1728-29	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1730	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1731	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1733	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1735	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1736	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1737	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1738-39	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1740	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1741	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1742	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1747	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1748	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1749	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1791-95	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1797	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1802	NRSA02J-750X	MG R	75Ω 1/10W	J
	R1806	QRE121J-271Y	C R	270Ω 1/2W	J
	R1807	NRSA02J-680X	MG R	68Ω 1/10W	J

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R1810	QRG01GJ-560	OM R	56Ω 1W	J
	R1811	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1815	QRE121J-181Y	C R	180Ω 1/2W	J
	R1816	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1817	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1846	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1849	NRSA02J-153X	MG R	15kΩ 1/10W	J
⚠	R1901	QRF074K-4R7	UNF R	4.7 Ω 7W	K
	R1903	QRL02EJ-683X	OM R	68kΩ 2W	J
	R1921	QRE121J-681Y	C R	680Ω 1/2W	J
	R1922	QRT029J-1R2	MF R	1.2Ω 2W	J
	R1923	QRM059J-R22	MP R	0.22Ω 5W	J
	R1926	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1928	QRL03EJ-563X	O M RESISTOR	56kΩ 3W	J
	R1929	QRE121J-822Y	C R	8.2kΩ 1/2W	J
	R1932	QRE121J-564Y	C R	560kΩ 1/2W	J
	R1933	QRE121J-180Y	C R	18Ω 1/2W	J
	R1934	NRSA02J-333X	MG R	33kΩ 1/10W	J
	R1936	QRG01GJ-561	OM R	560Ω 1W	J
	R1941	QRE121J-821Y	C R	820Ω 1/2W	J
	R1942	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1943	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1944	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1974	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1976	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1977	QRE121J-122Y	C R	1.2kΩ 1/2W	J
	R1978	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1979	QRT02EJ-2R7X	MF R	2.7Ω 2W	J
	R1980	QRL02EJ-103X	O M RESISTOR	10kΩ 2W	J
	R1985	QRE121J-330Y	C R	33Ω 1/2W	J
	R1986	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1987	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1988	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
⚠	R1991	QRZ0057-825	C R	8.2MΩ 1W	J

CAPACITOR

C1001	QETN1HM-106Z	E CAP.	10µF 50V	M
C1002-03	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1004	QETN1CM-107Z	E CAP.	100µF 16V	M
C1005	QETN1CM-227Z	E CAP.	220µF 16V	M
C1006	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1008	QETN1HM-475Z	E CAP.	4.7µF 50V	M
C1103	QETN1CM-476Z	E CAP.	47µF 16V	M
C1104-07	NCB21HK-472X	C CAP.	4700pF 50V	K
C1109	NCB21HK-472X	C CAP.	4700pF 50V	K
C1110	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
C1112	QETN1CM-476Z	E CAP.	47µF 16V	M
C1113	NCB21HK-472X	C CAP.	4700pF 50V	K
C1115-16	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1117	QFV71HJ-224Z	MF CAP.	0.22µF 50V	J
C1119	QETN1HM-474Z	E CAP.	0.47µF 50V	M
C1120	NDC21HJ-121X	C CAP.	120pF 50V	J
C1121-22	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1161	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1162	NCB21HK-152X	C CAP.	1500pF 50V	K
C1164-65	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1166	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
C1301	NCB21HK-123X	C CAP.	0.012µF 50V	K
C1302	QETN1HM-475Z	E CAP.	4.7µF 50V	M
C1303	NDC21HJ-100X	C CAP.	10pF 50V	J
C1304-05	QETN1HM-474Z	E CAP.	0.47µF 50V	M
C1306	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1307	QETN1CM-477Z	E CAP.	470µF 16V	M
C1308	QETN1CM-107Z	E CAP.	100µF 16V	M
C1309	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1310	NDC21HJ-221X	C CAP.	220pF 50V	J
C1311	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1312	QENC1HM-474Z	BP E CAP.	0.47µF 50V	M
C1313	QETN1HM-335Z	E CAP.	3.3µF 50V	M

CAPACITOR

C1314	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1315	QETN1CM-107Z	E CAP.	100µF 16V	M
C1316	QETN1HM-106Z	E CAP.	10µF 50V	M
C1317	NCB21HK-473X	C CAP.	0.047µF 50V	K
C1321	NDC21HJ-120X	C CAP.	12pF 50V	J
C1322	NCB21HK-273X	C CAP.	0.027µF 50V	K
C1323	QETN1HM-225Z	E CAP.	2.2µF 50V	M
C1324	QETN1HM-106Z	E CAP.	10µF 50V	M
C1325	QENC1HM-106Z	BP E CAP.	10µF 50V	M
C1326	NCS21HJ-221X	C CAP.	220pF 50V	J
C1341	QETN1HM-106Z	E CAP.	10µF 50V	M
C1352	QFZ0097-103	M M CAP.	0.01µF 1250V	K
C1354-56	NDC21HJ-271X	C CAP.	270pF 50V	J
C1357	QETN1AM-477Z	E CAP.	470µF 10V	M
C1365-67	QENC1HM-105Z	BP E CAP.	1µF 50V	M
C1401	QFV71HJ-474Z	MF CAP.	0.47µF 50V	J
C1402	QFV71HJ-104Z	MF CAP.	0.1µF 50V	J
C1422	QETN1HM-105Z	E CAP.	1µF 50V	M
C1423	QCS32HJ-100Z	C CAP.	10pF 500V	J
C1424	QFLC2AJ-103Z	M CAP.	0.01µF 100V	J
C1426	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
C1427	QETN1VM-107Z	E CAP.	100µF 35V	M
C1428	QEHR1VM-107Z	E CAP.	100µF 35V	M
C1429	QETN1HM-106Z	E CAP.	10µF 50V	M
C1430	QFN32AJ-272Z	M CAP.	2700pF 100V	J
C1433	QEHR1HM-475Z	E CAP.	4.7µF 50V	M
C1435	QETM1EM-228	E CAP.	2200µF 25V	M
C1436	QFV71HJ-334Z	MF CAP.	0.33µF 50V	J
C1501	QETN1CM-476Z	E CAP.	47µF 16V	M
C1502	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1503	QETN1HM-106Z	E CAP.	10µF 50V	M
C1523	QTMN1VM-476Z	E CAP.	47µF 35V	M
⚠ C1525	QFZ0200-772	MPP CAP.	7700pF1.5kVH	±3%
C1526	QTMN1EM-337Z	E CAP.	330µF 25V	M
⚠ C1527	QFZ0199-914	MPP CAP.	0.91µF 250V	J
C1531	QEZ0203-107	E CAP.	100µF 160V	M
C1552	QETM1VM-108	E CAP.	1000µF 35V	M
C1554	QETN2EM-475Z	E CAP.	4.7µF 250V	M
C1555	QFLC2AJ-104Z	M CAP.	0.1µF 100V	J
C1571	QETN1AM-107Z	E CAP.	100µF 10V	M
C1572	QETN1EM-476Z	E CAP.	47µF 25V	M
C1581	QFV71HJ-104Z	MF CAP.	0.1µF 50V	J
C1651	QTNC1HM-105Z	E CAP.	1µF 50V	M
C1652-53	QEHR1HM-106Z	E CAP.	10µF 50V	M
C1654	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
C1655	QEHQ1VM-228	E CAP.	2200µF 35V	M
C1656	QEHR1EM-477Z	E CAP.	470µF 25V	M
C1658	QETN1HM-226Z	E CAP.	22µF 50V	M
C1659	QETN1CM-107Z	E CAP.	100µF 16V	M
C1663	QEHR1HM-106Z	E CAP.	10µF 50V	M
C1664	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
C1665	QEHR1HM-105Z	E CAP.	1µF 50V	M
C1705	QETN1CM-477Z	E CAP.	470µF 16V	M
C1706	NCB21EK-104X	C CAP.	0.1µF 25V	K
C1707	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1708	QETN1CM-476Z	E CAP.	47µF 16V	M
C1709	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1710	QETN1CM-107Z	E CAP.	100µF 16V	M
C1711-13	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1714-15	NDC21HJ-330X	C CAP.	33pF 50V	J
C1716-17	NDC21HJ-181X	C CAP.	180pF 50V	J
C1718	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1719	QETN1HM-105Z	E CAP.	1µF 50V	M
C1720	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1721	NCB21HK-333X	C CAP.	0.033µF 50V	K
C1722	NCB21HK-102X	C CAP.	1000pF 50V	K
C1724	NDC21HJ-560X	C CAP.	56pF 50V	J
C1728-29	NDC21HJ-181X	C CAP.	180pF 50V	J
C1730	NCB21HK-103X	C CAP.	0.01µF 50V	K
C1738	QETN1HM-226Z	E CAP.	22µF 50V	M
C1741-43	QETN1HM-105Z	E CAP.	1µF 50V	M
C1744	NCB21HK-103X	C CAP.	0.01µF 50V	K

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C1805	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1806	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1811	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1841	NCB21HK-152X	C CAP.	1500pF 50V	K
⚠	C1901	QFZ9040-104	MF CAP.	0.1µFAC275V	M
⚠	C1904	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1905	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1907	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1909	QEZ0199-127	E CAP.	120µF 400V	M
⚠	C1910	QFZ9040-473	MM CAP.	0.047µFAC275V	M
	C1922	QFLC1HJ-471Z	M CAP.	470pF 50V	J
	C1924	QETN1VM-107Z	E CAP.	100µF 35V	M
	C1926	QFLC1HJ-332Z	M CAP.	3300pF 50V	J
	C1928	NCB21HK-473X	C CAP.	0.047µF 50V	K
	C1929	QFP32GJ-223	PP CAP.	0.022µF 400V	J
	C1930	QCZ0325-561	C CAP.	560pF 2000V	K
	C1931-32	QCZ0325-151	C CAP.	150pF 2000V	K
	C1941	QCZ0122-561	C CAP.	560pF 2000V	K
	C1942	QEZ0420-107	E CAP.	100µF 160V	M
	C1945	QEHR1CM-108Z	E CAP.	1000µF 16V	M
	C1946	QEHR1CM-477Z	E CAP.	470µF 16V	M
	C1948	QEHR1VM-108Z	E CAP.	1000µF 35V	M
	C1949	NDC21HJ-471X	C CAP.	470pF 50V	J
	C1950	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C1971	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1972	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1976	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1977	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1978	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1979	QETN1CM-107Z	E CAP.	100µF 16V	M
⚠	C1991	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1992	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1993	QCZ9079-102	C CAP.	1000pFAC250V	M
	TRANSFORMER				
⚠	T1522	QQH0058-001	FB TRANSF.		
⚠	T1921	QQS0050-001	SW TRANSF.		
	COIL				
	L1001-02	QQL244K-8R2Z	COIL	8.2µH	
	L1101	QQLZ014-2R2	PEAKING COIL	2.2µH	
	L1103	QQL244K-8R2Z	COIL	8.2µH	
	L1351-53	QQL244K-470Z	COIL	47µH	
	L1523	QQL342J-2R2Z	INDUCTOR		
	L1551	QQLZ018-540	HEATER CHOKE		
	L1701	QQL39BK-5R6Z	COIL	5.6µH	
	L1941-43	QQL26AK-820Z	COIL	82µH	
	DIODE				
	D1001	MA333O/L/-X	ZENER DIODE		
	D1102	1SS85-T2	SI.DIODE		
	D1301-02	MA3091/M/-X	ZENER DIODE		
	D1305	RB100A-T2	SI.DIODE		
	D1341-42	MA111-X	SI.DIODE		
	D1351-53	MA3051/H/-X	ZENER DIODE		
	D1354-56	MA111-X	SI.DIODE		
	D1421-22	MA336O/M/-X	ZENER DIODE		
	D1423	1SR124-400A-T2	SI.DIODE		
	D1424-25	MA111-X	SI.DIODE		
	D1427	MA327O/H/-X	ZENER DIODE		
	D1551	RGP10J-TS-T3	SI.DIODE		
	D1552	RH1S-T3	SI.DIODE		
	D1553	MA3091/M/-X	ZENER DIODE		
	D1554	MA111-X	SI.DIODE		
	D1571	MA3075/M/-X	ZENER DIODE		
	D1581	MA312O/M/-X	ZENER DIODE		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D1582	RGP10J-TS-T3	SI.DIODE		
	D1651-52	MA111-X	SI.DIODE		
	D1653	MA318O/M/-X	ZENER DIODE		
	D1703	SPR-39MVWF	L.E.D.		
	D1706-07	MA111-X	SI.DIODE		
	D1731	MA111-X	SI.DIODE		
	D1791-95	MA3056/M/-X	ZENER DIODE		
⚠	D1901	D2SBA60	BRIDGE DIODE		
	D1921	RGP10J-TS-T3	SI.DIODE		
	D1922-24	MA111-X	SI.DIODE		
	D1926	MA3056/M/-X	ZENER DIODE		
	D1927	MA3068/M/-X	ZENER DIODE		
	D1929	RD12E/B2/-T5	ZENER DIODE		
	D1930	EG1A-T3	SI.DIODE		
	D1932	MA111-X	SI.DIODE		
	D1933	RD27E/B2/-T5	ZENER DIODE		
	D1941	RU3AM-LFC4	SI.DIODE		
	D1942	RU3YX-LFC4	SI.DIODE		
	D1943	RGP10J-TS-T3	SI.DIODE		
	D1945	MA3075/H/-X	ZENER DIODE		
	D1973-74	MA111-X	SI.DIODE		
	D1982-83	MA111-X	SI.DIODE		
	TRANSISTOR				
	Q1102	2SC5083/L-P/-T	SI.TRANSISTOR		
	Q1103	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1161	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1301	2SA1037AK/QR/-X	SI.TRANSISTOR		
	Q1302	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1351-53	2SC4722/NP/	SI.TRANSISTOR		
	Q1401	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1402	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1521	2SK3065-W	CHIP FET		
⚠	Q1522	BU808DFI-030Y	SI.TRANSISTOR		H.OUT
	Q1523-24	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1571	2SA949/Y/Z1-T	SI.TRANSISTOR		
	Q1572	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1651	2SA1037AK/QR/-X	SI.TRANSISTOR		
	Q1652	DTC323TK-X	DIGI.TRANSISTOR		
	Q1654-55	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1701	2SC2785/JH/-T	SI.TRANSISTOR		
	Q1702-03	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1705-06	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1803	2SC1815/YG/-T	SI.TRANSISTOR		
	Q1804	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1941	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1943	DTC114EKA-X	DIGI.TRANSISTOR		
	Q1973	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1974	2SA966/OY/-T	SI.TRANSISTOR		
	Q1975	DTC124EKA-X	DIGI.TRANSISTOR		
	IC				
	IC1301	NN5198K	I C		
	IC1421	AN5539-LF	I C		
	IC1651	LA4287	I C		
	IC1652	SI-5001X-X	I.C(HYBRID)		
	IC1701	MN1873287JX	I.C(MICRO-COMP)		
	IC1702	AT24C08-F21TR3	I.C.		(SERVICE)
	IC1703	L78LR05E-MA	I.C.(MONO-ANA)		
	IC1704	PIC-28143SY	IR DETECT UNIT		
	IC1921	STR-G6653	I C		
	IC1941	SE115N-LF12	I C		
	IC1971	BA51W12ST-V5	I C		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
		LC30349-001A-H	LED HOLDER		
	CF1161	SFSH4.5MCB	CERAMIC FILTER		
⚠	CP1981	ICP-N75-Y	I.C.PROTECT		
⚠	CP1982	ICP-N75-Y	I.C.PROTECT		
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A	
	FC1901	CEMG002-001Z	FUSE CLIP		
	J1002	CEMN075-001	PIN JACK		
	J1003	CEMN065-001	PIN JACK		
	J1004	CEMN065-002	PIN JACK		
	J1005	QMS3004-C01	HEADPHONE JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1351	CE41433-001Z	BEADS CORE		
	K1421	CE42050-001Z	CORE		
	K1921-22	QQR0872-001Y	FERRITE BEADS		
	K1923	QQR0716-001Z	LEAD CORE		
	K1924	QQR0872-001Y	FERRITE BEADS		
	K1941-43	QQR0872-001Y	FERRITE BEADS		
⚠	LF1901	QQR0906-001	LINE FILTER		
⚠	PC1921	PC123F2	I.C.(PH.COUPLER)		
⚠	RY1971	CESK028-002	RELAY		
	S1701	QSW0619-003Z	PUSH SWITCH	VOL +	
	S1702	QSW0619-003Z	PUSH SWITCH	VOL -	
	S1703	QSW0619-003Z	PUSH SWITCH	CH +	
	S1704	QSW0619-003Z	PUSH SWITCH	CH -	
	S1705	QSW0619-003Z	PUSH SWITCH	MENU	
⚠	S1901	QSW0750-001	PUSH SWITCH	POWER SW	
	SF1102	QAX0594-001	SAW FILTER		
	SF1122	QAX0325-001	SAW FILTER		
⚠	SK1351	CE42554-001	C.R.T.SOCKET		
⚠	TH1901	QAD0101-9R0	P.THERMISTOR		
	TU1001	QAU0094-002	VHF/UHF TUNER		
⚠	VA1901	ERZV10V621CS	VARISTOR		
	W1068	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1088	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1155	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1173	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1227	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1229	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1231	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1235	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1261	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1276-77	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1283	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1286	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1294-95	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1313	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1315	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1422	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1427-28	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1430	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1465	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1476	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1486	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	W1500	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1527	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1529-30	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1532-34	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1537-38	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1541-42	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1545-46	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1549-53	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1561	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	X1301	QAX0500-001Z	CRYSTAL		
	X1302	CE42690-001Z	CRYSTAL		
	X1701	FCR12.0M2S	CER.RESONATOR		
	Y1302	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1372-74	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1704	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1921	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1941-42	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1945	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1972	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	

AV-A14T3 (HK) / AV-1413EE

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SCG-1222A-H2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1002-03	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1004	NRSA02J-224X	MG R	220kΩ 1/10W	J
	R1102	NRSA02J-750X	MG R	75Ω 1/10W	J
	R1103	NRSA02J-100X	MG R	10Ω 1/10W	J
	R1109	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1110	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1111	NRSA02J-181X	MG R	180Ω 1/10W	J
	R1112	NRSA02J-100X	MG R	10Ω 1/10W	J
	R1113	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1114	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1115	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1117	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1118	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1120	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1121	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1159	NRSA02J-184X	MG R	180kΩ 1/10W	J
	R1301	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1302	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1303-05	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1306	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1307	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1308	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1312	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1313-14	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1321	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1322	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1323	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1324	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1326	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1327	NRSA02J-475X	MG R	4.7MΩ 1/10W	J
	R1341	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1345-46	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1347	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1353	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1354-56	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1357-59	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1360-62	QRZ0107-152Z	C R	1500Ω 1/2W	K
	R1363-65	QRL029J-123	OM R	12kΩ 2W	J
	R1366-68	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1369	QRE121J-394Y	C R	390kΩ 1/2W	J
	R1372	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1374	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1401	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1421-22	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1423	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1424	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1425	NRSA02J-471X	MG R	470Ω 1/10W	J
	R1426	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1429	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1430	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1431	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1432-33	QRE121J-3R9Y	C R	3.9Ω 1/2W	J
	R1436	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1440	QRE121J-561Y	C R	560Ω 1/2W	J
	R1441	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1442	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
	R1453	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1501	QRE121J-221Y	C R	220Ω 1/2W	J
	R1502	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1503	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1521	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1522	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1524	QRL03EJ-680X	OM R	68Ω 3W	J
	R1526	QRE121J-270Y	C R	27Ω 1/2W	J
	R1529	QRG029J-820	OM R	82 Ω 2W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1531	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1533-34	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
⚠	R1551	QRX01GJ-1R0	MF R	1.0Ω 1W	J
	R1552	QRJ146J-2R2X	C R	2.2Ω 1/4W	J
	R1554	QRE121J-182Y	C R	1.8kΩ 1/2W	J
	R1571	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1573-74	QRT02EJ-2R2X	MF R	2.2Ω 2W	J
	R1576	QRE121J-223Y	C R	22kΩ 1/2W	J
	R1577	NRSA02J-562X	MG R	5.6kΩ 1/10W	J
	R1578	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1581	QRE121J-182Y	C R	1.8kΩ 1/2W	J
	R1582	NRSA02J-273X	MG R	27kΩ 1/10W	J
	R1583	NRSA02J-393X	MG R	39kΩ 1/10W	J
	R1651	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1652	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1653	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
	R1654	QRX029J-4R7	MF R	4.7Ω 2W	J
	R1656	NRSA02J-123X	MG R	12kΩ 1/10W	J
	R1657	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1658-59	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1660	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1661-62	QRE121J-271Y	C R	270Ω 1/2W	J
	R1664	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1665	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1704-05	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1706-07	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1708	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1709-14	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1715-16	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1718	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1719	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1720	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1721	NRSA02J-103X	MG R	10kΩ 1/10W	J
⚠	R1723	QRZ9023-270	F R	27 Ω 2W	J
	R1724	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1725	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1726	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1727	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1728-29	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1730	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1731	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1735	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1736	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1737	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1738-39	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1740	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1741	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1742	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1747	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1748	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1749	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1791-95	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1797	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1802	NRSA02J-750X	MG R	75Ω 1/10W	J
	R1806	QRE121J-271Y	C R	270Ω 1/2W	J
	R1807	NRSA02J-680X	MG R	68Ω 1/10W	J
	R1810	QRG01GJ-560	OM R	56Ω 1W	J
	R1811	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1815	QRE121J-181Y	C R	180Ω 1/2W	J
	R1816	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1817	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
⚠	R1901	QRF074K-4R7	UNF R	4.7 Ω 7W	K
	R1903	QRL02EJ-683X	OM R	68kΩ 2W	J
	R1921	QRE121J-681Y	C R	680Ω 1/2W	J
	R1922	QRT029J-1R2	MF R	1.2Ω 2W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1923	QRM059J-R22	MP R	0.22Ω 5W	J
	R1926	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1928	QRL03EJ-563X	O M RESISTOR	56kΩ 3W	J
	R1929	QRE121J-822Y	C R	8.2kΩ 1/2W	J
	R1932	QRE121J-564Y	C R	560kΩ 1/2W	J
	R1933	QRE121J-180Y	C R	18Ω 1/2W	J
	R1934	NRSA02J-333X	MG R	33kΩ 1/10W	J
	R1936	QRG01GJ-561	OM R	560Ω 1W	J
	R1941	QRE121J-821Y	C R	820Ω 1/2W	J
	R1942	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1943	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1944	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1974	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1976	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1977	QRE121J-122Y	C R	1.2kΩ 1/2W	J
	R1978	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1979	QRT02EJ-2R7X	MF R	2.7Ω 2W	J
	R1980	QRL02EJ-103X	O M RESISTOR	10kΩ 2W	J
	R1985	QRE121J-330Y	C R	33Ω 1/2W	J
	R1986	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1987	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1988	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
⚠	R1991	QRZ0057-825	C R	8.2MΩ 1W	J
	CAPACITOR				
	C1001	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1002-03	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1004	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1005	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1006	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1008	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1103	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1104-07	NCB21HK-472X	C CAP.	4700pF 50V	K
	C1109	NCB21HK-472X	C CAP.	4700pF 50V	K
	C1110	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	C1112	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1113	NCB21HK-472X	C CAP.	4700pF 50V	K
	C1115-16	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1117	QFV71HJ-224Z	MF CAP.	0.22µF 50V	J
	C1119	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1120	NDC21HJ-121X	C CAP.	120pF 50V	J
	C1121-22	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1162	NCB21HK-152X	C CAP.	1500pF 50V	K
	C1301	NCB21HK-123X	C CAP.	0.012µF 50V	K
	C1302	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1303	NDC21HJ-100X	C CAP.	10pF 50V	J
	C1304	QFV71HJ-474Z	MF CAP.	0.47µF 50V	J
	C1305	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1306	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1307	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1308	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1309	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1310	NDC21HJ-221X	C CAP.	220pF 50V	J
	C1311	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1312	QENC1HM-474Z	BP E CAP.	0.47µF 50V	M
	C1313	QETN1HM-335Z	E CAP.	3.3µF 50V	M
	C1314	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1315	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1316	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1317	NCB21HK-473X	C CAP.	0.047µF 50V	K
	C1321	NDC21HJ-120X	C CAP.	12pF 50V	J
	C1322	NCB21HK-273X	C CAP.	0.027µF 50V	K
	C1323	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1324	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1325	QENC1HM-106Z	BP E CAP.	10µF 50V	M
	C1326	NCS21HJ-221X	C CAP.	220pF 50V	J
	C1341	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1352	QFZ0097-103	M M CAP.	0.01µF 1250V	K

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C1354	NDC21HJ-271X	C CAP.	270pF 50V	J
	C1355	NDC21HJ-221X	C CAP.	220pF 50V	J
	C1356	NDC21HJ-331X	C CAP.	330pF 50V	J
	C1357	QETN1AM-477Z	E CAP.	470µF 10V	M
	C1365-67	QENC1HM-105Z	BP E CAP.	1µF 50V	M
	C1401	QFV71HJ-474Z	MF CAP.	0.47µF 50V	J
	C1402	QFV71HJ-104Z	MF CAP.	0.1µF 50V	J
	C1422	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1423	QCS32HJ-100Z	C CAP.	10pF 500V	J
	C1424	QFLC2AJ-103Z	M CAP.	0.01µF 100V	J
	C1426	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1427	QETN1VM-107Z	E CAP.	100µF 35V	M
	C1428	QEHR1VM-107Z	E CAP.	100µF 35V	M
	C1429	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1430	QFN32AJ-272Z	M CAP.	2700pF 100V	J
	C1433	QEHR1HM-475Z	E CAP.	4.7µF 50V	M
	C1435	QETM1EM-228	E CAP.	2200µF 25V	M
	C1436	QFV71HJ-334Z	MF CAP.	0.33µF 50V	J
	C1501	QETN1EM-107Z	E CAP.	100µF 25V	M
	C1502	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1503	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1523	QTMN1VM-476Z	E CAP.	47µF 35V	M
⚠	C1525	QFZ0200-782	MPP CAP.	7800pF1.5kVH	±3%
	C1526	QTMN1EM-337Z	E CAP.	330µF 25V	M
⚠	C1527	QFZ0199-914	MPP CAP.	0.91µF 250V	J
	C1531	QEZ0203-107	E CAP.	100µF 160V	M
	C1552	QETM1VM-108	E CAP.	1000µF 35V	M
	C1554	QETN2EM-475Z	E CAP.	4.7µF 250V	M
	C1555	QFLC2AJ-104Z	M CAP.	0.1µF 100V	J
	C1571	QETN1AM-107Z	E CAP.	100µF 10V	M
	C1572	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1581	QFV71HJ-104Z	MF CAP.	0.1µF 50V	J
	C1651	QTNC1HM-105Z	E CAP.	1µF 50V	M
	C1652-53	QEHR1HM-106Z	E CAP.	10µF 50V	M
	C1654	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C1655	QEHQ1VM-228	E CAP.	2200µF 35V	M
	C1656	QEHR1EM-477Z	E CAP.	470µF 25V	M
	C1658	QETN1HM-226Z	E CAP.	22µF 50V	M
	C1659	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1663	QEHR1HM-106Z	E CAP.	10µF 50V	M
	C1664	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C1665	QEHR1HM-105Z	E CAP.	1µF 50V	M
	C1705	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1706	NCB21EK-104X	C CAP.	0.1µF 25V	K
	C1707	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1708	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1709	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1710	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1711-13	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1714-15	NDC21HJ-330X	C CAP.	33pF 50V	J
	C1716-17	NDC21HJ-181X	C CAP.	180pF 50V	J
	C1718	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1719	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1720	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1721	NCB21HK-333X	C CAP.	0.033µF 50V	K
	C1722	NDC21HJ-101X	C CAP.	100pF 50V	J
	C1724	NDC21HJ-560X	C CAP.	56pF 50V	J
	C1728-29	NDC21HJ-181X	C CAP.	180pF 50V	J
	C1730	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1738	QETN1HM-226Z	E CAP.	22µF 50V	M
	C1744	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1805	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1806	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1811	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1841	NCB21HK-152X	C CAP.	1500pF 50V	K
⚠	C1901	QFZ9040-104	MF CAP.	0.1µFAC275V	M
⚠	C1904	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1905	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1907	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1909	QEZ0199-127	E CAP.	120µF 400V	M
⚠	C1910	QFZ9040-473	MM CAP.	0.047µFAC275V	M
	C1922	QFLC1HJ-471Z	M CAP.	470pF 50V	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C1924	QETN1VM-107Z	E CAP.	100μF 35V	M
	C1926	QFLC1HJ-332Z	M CAP.	3300pF 50V	J
	C1928	NCB21HK-473X	C CAP.	0.047μF 50V	K
	C1929	QFP32GJ-223Z	PP CAP.	0.022μF 400V	J
	C1930	QCZ0325-561	C CAP.	560pF 2000V	K
	C1931-32	QCZ0325-151	C CAP.	150pF 2000V	K
	C1941	QCZ0122-561	C CAP.	560pF 2000V	K
	C1942	QEZ0420-107	E CAP.	100μF 160V	M
	C1945	QEHR1CM-108Z	E CAP.	1000μF 16V	M
	C1946	QEHR1CM-477Z	E CAP.	470μF 16V	M
	C1948	QEHR1VM-108Z	E CAP.	1000μF 35V	M
	C1949	NDC21HJ-471X	C CAP.	470pF 50V	J
	C1950	NCB21HK-104X	CHIP CAP.	0.1μF 50V	K
	C1971	QETN1HM-475Z	E CAP.	4.7μF 50V	M
	C1972	QETN1CM-107Z	E CAP.	100μF 16V	M
	C1976	QETN1HM-105Z	E CAP.	1μF 50V	M
	C1977	QETN1CM-107Z	E CAP.	100μF 16V	M
	C1978	QETN1CM-227Z	E CAP.	220μF 16V	M
	C1979	QETN1CM-107Z	E CAP.	100μF 16V	M
⚠	C1991	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1992	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1993	QCZ9079-102	C CAP.	1000pFAC250V	M
	TRANSFORMER				
⚠	T1522	QQH0058-001	FB TRANSF.		
⚠	T1921	QQS0050-001	SW TRANSF.		
	COIL				
	L1001-02	QQL244K-8R2Z	COIL	8.2μH	
	L1101	QQLZ014-2R2	PEAKING COIL	2.2μH	
	L1103	QQL244K-8R2Z	COIL	8.2μH	
	L1351-53	QQL244K-470Z	COIL	47μH	
	L1523	QQL342J-2R2Z	INDUCTOR		
	L1551	QQLZ018-560	HEATER CHOKE		
	L1701	QQL39BK-5R6Z	COIL	5.6μH	
	L1941-43	QQL26AK-820Z	COIL	82μH	
	DIODE				
	D1001	MA3330/L/-X	ZENER DIODE		
	D1102	1SS85-T2	SI.DIODE		
	D1301-02	MA3091/M/-X	ZENER DIODE		
	D1305	RB100A-T2	SI.DIODE		
	D1341-42	MA111-X	SI.DIODE		
	D1351-53	MA3051/H/-X	ZENER DIODE		
	D1354-56	MA111-X	SI.DIODE		
	D1421-22	MA3360/M/-X	ZENER DIODE		
	D1423	1SR124-400A-T2	SI.DIODE		
	D1424-25	MA111-X	SI.DIODE		
	D1427	MA3270/H/-X	ZENER DIODE		
	D1551-52	RGP10J-TS-T3	SI.DIODE		
	D1553	MA3091/M/-X	ZENER DIODE		
	D1554	MA111-X	SI.DIODE		
	D1571	MA3075/M/-X	ZENER DIODE		
	D1581	MA3200/M/-X	ZENER DIODE		
	D1582	RGP10J-TS-T3	SI.DIODE		
	D1651-52	MA111-X	SI.DIODE		
	D1653	MA3180/M/-X	ZENER DIODE		
	D1703	SPR-39MVWF	L.E.D.		
	D1706-07	MA111-X	SI.DIODE		
	D1731	MA111-X	SI.DIODE		
	D1791-95	MA3056/M/-X	ZENER DIODE		
⚠	D1901	D2SBA60	BRIDGE DIODE		
	D1921	RGP10J-TS-T3	SI.DIODE		
	D1922-24	MA111-X	SI.DIODE		
	D1926	MA3056/M/-X	ZENER DIODE		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D1927	MA3068/M/-X	ZENER DIODE		
	D1929	RD12E/B2/-T5	ZENER DIODE		
	D1930	EG1A-T3	SI.DIODE		
	D1932	MA111-X	SI.DIODE		
	D1933	RD27E/B2/-T5	ZENER DIODE		
	D1941	RU3AM-LFC4	SI.DIODE		
	D1942	RU3YX-LFC4	SI.DIODE		
	D1943	RGP10J-TS-T3	SI.DIODE		
	D1945	MA3075/H/-X	ZENER DIODE		
	D1973-74	MA111-X	SI.DIODE		
	D1982-83	MA111-X	SI.DIODE		
	TRANSISTOR				
	Q1102	2SC5083/L-P/-T	SI.TRANSISTOR		
	Q1103	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1301	2SA1037AK/QR/-X	SI.TRANSISTOR		
	Q1302	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1351-53	2SC4722/NP/	SI.TRANSISTOR		
	Q1401	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1402	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1521	2SK3065-W	CHIP FET		
⚠	Q1522	BU808DFI-030Y	SI.TRANSISTOR		H.OUT
	Q1523-24	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1571	2SA949/Y/Z1-T	SI.TRANSISTOR		
	Q1572	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1651	2SA1037AK/QR/-X	SI.TRANSISTOR		
	Q1652	DTC323TK-X	DIGI.TRANSISTOR		
	Q1654-55	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1702-03	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1705-06	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1803	2SC1815/YG/-T	SI.TRANSISTOR		
	Q1804	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1941	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1943	DTC114EKA-X	DIGI.TRANSISTOR		
	Q1973	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1974	2SA966/OY/-T	SI.TRANSISTOR		
	Q1975	DTC124EKA-X	DIGI.TRANSISTOR		
	IC				
	IC1301	NN5198K	I C		
	IC1421	AN5539-LF	I C		
	IC1651	LA4287	I C		
	IC1652	SI-5001X-X	I.C(HYBRID)		
	IC1701	MN1873287JZ	I.C(MICRO-COMP)		
	IC1702	AT24C08-F21TR3	I.C.		(SERVICE)
	IC1703	L78LR05E-MA	I.C.(MONO-ANA)		
	IC1704	PIC-28143SY	IR DETECT UNIT		
	IC1921	STR-G6653	I C		
	IC1941	SE115N-LF12	I C		
	IC1971	BA51W12ST-V5	I C		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
		LC30349-001A-H	LED HOLDER		
⚠	CP1981	ICP-N75-Y	I.C.PROTECT		
⚠	CP1982	ICP-N75-Y	I.C.PROTECT		
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A	
	FC1901	CEMG002-001Z	FUSE CLIP		
	J1002	CEMN075-001	PIN JACK		
	J1003	CEMN065-001	PIN JACK		
	J1004	CEMN065-002	PIN JACK		
	J1005	QMS3004-C01	HEADPHONE JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1351	CE41433-001Z	BEADS CORE		
	K1421	CE42050-001Z	CORE		
	K1921-22	QQR0872-001Y	FERRITE BEADS		
	K1923	QQR0716-001Z	LEAD CORE		
	K1924	QQR0872-001Y	FERRITE BEADS		
	K1941-43	QQR0872-001Y	FERRITE BEADS		
⚠	LF1901	QQR0906-001	LINE FILTER		
⚠	PC1921	PC123F2	I.C.(PH.COUPLER)		
⚠	RY1971	QSK0061-001	RELAY		
	S1701	QSW0619-003Z	PUSH SWITCH	VOL +	
	S1702	QSW0619-003Z	PUSH SWITCH	VOL -	
	S1703	QSW0619-003Z	PUSH SWITCH	CH +	
	S1704	QSW0619-003Z	PUSH SWITCH	CH -	
	S1705	QSW0619-003Z	PUSH SWITCH	MENU	
⚠	S1901	QSW0750-001	PUSH SWITCH	POWER SW	
	SF1102	QAX0594-001	SAW FILTER		
	SF1122	QAX0325-001	SAW FILTER		
⚠	SK1351	CE42554-001	C.R.T.SOCKET		
⚠	TH1901	QAD0101-9R0	P.THERMISTOR		
	TU1001	QAU0094-002	VHF/UHF TUNER		
⚠	VA1901	ERZV10V621CS	VARISTOR		
	W1155	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1231	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1270-72	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1276-77	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1286	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1294-95	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1338	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1422	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	W1427	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1527	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1529-30	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1532	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1541	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1549-50	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1553	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1574	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1581	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1583	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1586	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1590-93	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1595	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1600-01	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	X1301	QAX0500-001Z	CRYSTAL		
	X1302	CE42690-001Z	CRYSTAL		
	X1701	FCR12.0M2S	CER.RESONATOR		
	Y1302	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1372-74	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1704	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1921	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1941-42	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1945	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1972	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	

AV-A14M3(U)

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SCG-1220A-H2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1002-03	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1004	NRSA02J-224X	MG R	220kΩ 1/10W	J
	R1102	NRSA02J-750X	MG R	75Ω 1/10W	J
	R1103	NRSA02J-100X	MG R	10Ω 1/10W	J
	R1109	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1110	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1111	NRSA02J-181X	MG R	180Ω 1/10W	J
	R1112	NRSA02J-100X	MG R	10Ω 1/10W	J
	R1113	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1114	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1115	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1117	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1118	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1120	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1121	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1159	NRSA02J-184X	MG R	180kΩ 1/10W	J
	R1161	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1162	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1163	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1164	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1165	NRSA02J-220X	MG R	22Ω 1/10W	J
	R1166	NRSA02J-821X	MG R	820Ω 1/10W	J
	R1301	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1302	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1303-05	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1306	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1307	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1308	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1312	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1313-14	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1321	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1322	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1323	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1324	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1326	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1327	NRSA02J-475X	MG R	4.7MΩ 1/10W	J
	R1341	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1345-46	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1347	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1353	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1354-56	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1357-59	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1360-62	QRZ0107-152Z	C R	1500Ω 1/2W	K
	R1363-65	QRL029J-123	OM R	12kΩ 2W	J
	R1366-68	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1369	QRE121J-394Y	C R	390kΩ 1/2W	J
	R1372	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1374	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1401	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1421-22	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1423	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1424	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1425	NRSA02J-471X	MG R	470Ω 1/10W	J
	R1426	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1429	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1430	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1431	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1432-33	QRE121J-3R9Y	C R	3.9Ω 1/2W	J
	R1436	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1440	QRE121J-561Y	C R	560Ω 1/2W	J
	R1441	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1442	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
	R1453	NRSA02J-272X	MG R	2.7kΩ 1/10W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1501	QRE121J-221Y	C R	220Ω 1/2W	J
	R1502	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1503	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1521	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1522	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1524	QRL03EJ-680X	OM R	68Ω 3W	J
	R1526	QRE121J-270Y	C R	27Ω 1/2W	J
	R1529	QRG029J-820	OM R	82 Ω 2W	J
	R1531	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1533-34	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
⚠	R1551	QRX01GJ-1R0	MF R	1.0Ω 1W	J
	R1552	QRJ146J-2R2X	C R	2.2Ω 1/4W	J
	R1554	QRE121J-182Y	C R	1.8kΩ 1/2W	J
⚠	R1565	NRSA02F-4021X	CHIP RESISTOR	4020Ω 1/10W	J
⚠	R1566	NRSA02F-6041X	CHIP RESISTOR	6040Ω 1/10W	J
	R1571	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1573-74	QRT02EJ-2R2X	MF R	2.2Ω 2W	J
	R1576	QRE121J-223Y	C R	22kΩ 1/2W	J
	R1577	NRSA02J-562X	MG R	5.6kΩ 1/10W	J
	R1578	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1581	QRE121J-182Y	C R	1.8kΩ 1/2W	J
	R1582	NRSA02J-273X	MG R	27kΩ 1/10W	J
	R1583	NRSA02J-393X	MG R	39kΩ 1/10W	J
	R1651	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1652	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1653	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
	R1654	QRX029J-4R7	MF R	4.7Ω 2W	J
	R1656	NRSA02J-123X	MG R	12kΩ 1/10W	J
	R1657	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1658-59	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1660	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1661-62	QRE121J-271Y	C R	270Ω 1/2W	J
	R1664	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1665	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1704-05	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1706-07	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1708	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1709-14	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1715-16	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1718	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1719	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1720	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1721	NRSA02J-103X	MG R	10kΩ 1/10W	J
⚠	R1723	QRZ9023-270	F R	27 Ω 2W	J
	R1724	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1725	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1726	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1727	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1728-29	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1730	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1731	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1735	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1736	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1737	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1738-39	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1740	NRSA02J-392X	MG R	3.9kΩ 1/10W	J
	R1741	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1742	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1747	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1748	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1749	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1791-95	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1797	NRSA02J-153X	MG R	15kΩ 1/10W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1802	NRSA02J-750X	MG R	75Ω 1/10W	J
	R1806	QRE121J-271Y	C R	270Ω 1/2W	J
	R1807	NRSA02J-680X	MG R	68Ω 1/10W	J
	R1810	QRG01GJ-560	OM R	56Ω 1W	J
	R1811	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1815	QRE121J-181Y	C R	180Ω 1/2W	J
	R1816	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1817	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
⚠	R1901	QRF074K-4R7	UNF R	4.7 Ω 7W	K
	R1903	QRL02EJ-683X	OM R	68kΩ 2W	J
	R1921	QRE121J-681Y	C R	680Ω 1/2W	J
	R1922	QRT029J-1R2	MF R	1.2Ω 2W	J
	R1923	QRM059J-R22	MP R	0.22Ω 5W	J
	R1926	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1928	QRL03EJ-563X	O M RESISTOR	56kΩ 3W	J
	R1929	QRE121J-822Y	C R	8.2kΩ 1/2W	J
	R1932	QRE121J-564Y	C R	560kΩ 1/2W	J
	R1933	QRE121J-180Y	C R	18Ω 1/2W	J
	R1934	NRSA02J-333X	MG R	33kΩ 1/10W	J
	R1936	QRG01GJ-561	OM R	560Ω 1W	J
	R1941	QRE121J-821Y	C R	820Ω 1/2W	J
	R1942	NRSA02J-122X	MG R	1.2kΩ 1/10W	J
	R1943	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1944	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1974	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1976	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1977	QRE121J-122Y	C R	1.2kΩ 1/2W	J
	R1978	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1979	QRT02EJ-2R7X	MF R	2.7Ω 2W	J
	R1980	QRL02EJ-103X	O M RESISTOR	10kΩ 2W	J
	R1981	NRSA02J-273X	MG R	27kΩ 1/10W	J
	R1982	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1983	NRSA02J-823X	MG R	82kΩ 1/10W	J
	R1984	NRSA02J-183X	MG R	18kΩ 1/10W	J
	R1985	QRE121J-330Y	C R	33Ω 1/2W	J
	R1986	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1987	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1988	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
⚠	R1991	QRZ0057-825	C R	8.2MΩ 1W	J
	CAPACITOR				
	C1001	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1002-03	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1004	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1005	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1006	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1008	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1103	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1104-07	NCB21HK-472X	C CAP.	4700pF 50V	K
	C1109	NCB21HK-472X	C CAP.	4700pF 50V	K
	C1110	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	C1112	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1113	NCB21HK-472X	C CAP.	4700pF 50V	K
	C1115-16	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1117	QFV71HJ-224Z	MF CAP.	0.22µF 50V	J
	C1119	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1120	NDC21HJ-121X	C CAP.	120pF 50V	J
	C1121-22	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1161	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1162	NCB21HK-152X	C CAP.	1500pF 50V	K
	C1164-65	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1166	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C1301	NCB21HK-123X	C CAP.	0.012µF 50V	K
	C1302	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1303	NDC21HJ-100X	C CAP.	10pF 50V	J
	C1304	QFV71HJ-474Z	MF CAP.	0.47µF 50V	J
	C1305	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1306	NCB21HK-103X	C CAP.	0.01µF 50V	K

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C1307	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1308	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1309	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1310	NDC21HJ-221X	C CAP.	220pF 50V	J
	C1311	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1312	QENC1HM-474Z	BP E CAP.	0.47µF 50V	M
	C1313	QETN1HM-335Z	E CAP.	3.3µF 50V	M
	C1314	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1315	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1316	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1317	NCB21HK-473X	C CAP.	0.047µF 50V	K
	C1321	NDC21HJ-120X	C CAP.	12pF 50V	J
	C1322	NCB21HK-273X	C CAP.	0.027µF 50V	K
	C1323	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1324	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1325	QENC1HM-106Z	BP E CAP.	10µF 50V	M
	C1326	NCS21HJ-221X	C CAP.	220pF 50V	J
	C1341	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1352	QFZ0097-103	M M CAP.	0.01µF 1250V	K
	C1354	NDC21HJ-271X	C CAP.	270pF 50V	J
	C1355	NDC21HJ-221X	C CAP.	220pF 50V	J
	C1356	NDC21HJ-331X	C CAP.	330pF 50V	J
	C1357	QETN1AM-477Z	E CAP.	470µF 10V	M
	C1365-67	QENC1HM-105Z	BP E CAP.	1µF 50V	M
	C1401	QFV71HJ-474Z	MF CAP.	0.47µF 50V	J
	C1402	QFV71HJ-104Z	MF CAP.	0.1µF 50V	J
	C1422	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1423	QCS32HJ-100Z	C CAP.	10pF 500V	J
	C1424	QFLC2AJ-103Z	M CAP.	0.01µF 100V	J
	C1426	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1427	QETN1VM-107Z	E CAP.	100µF 35V	M
	C1428	QEHR1VM-107Z	E CAP.	100µF 35V	M
	C1429	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1430	QFN32AJ-272Z	M CAP.	2700pF 100V	J
	C1433	QEHR1HM-475Z	E CAP.	4.7µF 50V	M
	C1435	QETM1EM-228	E CAP.	2200µF 25V	M
	C1436	QFV71HJ-334Z	MF CAP.	0.33µF 50V	J
	C1501	QETN1EM-107Z	E CAP.	100µF 25V	M
	C1502	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1503	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1523	QTMN1VM-476Z	E CAP.	47µF 35V	M
⚠	C1525	QFZ0200-782	MPP CAP.	7800pF1.5kVH	±3%
	C1526	QTMN1EM-337Z	E CAP.	330µF 25V	M
⚠	C1527	QFZ0199-914	MPP CAP.	0.91µF 250V	J
	C1531	QEZ0203-107	E CAP.	100µF 160V	M
	C1552	QETM1VM-108	E CAP.	1000µF 35V	M
	C1554	QETN2EM-475Z	E CAP.	4.7µF 250V	M
	C1555	QFLC2AJ-104Z	M CAP.	0.1µF 100V	J
	C1562	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1571	QETN1AM-107Z	E CAP.	100µF 10V	M
	C1572	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1581	QFV71HJ-104Z	MF CAP.	0.1µF 50V	J
	C1651	QTNC1HM-105Z	E CAP.	1µF 50V	M
	C1652-53	QEHR1HM-106Z	E CAP.	10µF 50V	M
	C1654	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C1655	QEHQ1VM-228	E CAP.	2200µF 35V	M
	C1656	QEHR1EM-477Z	E CAP.	470µF 25V	M
	C1658	QETN1HM-226Z	E CAP.	22µF 50V	M
	C1659	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1663	QEHR1HM-106Z	E CAP.	10µF 50V	M
	C1664	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C1665	QEHR1HM-105Z	E CAP.	1µF 50V	M
	C1705	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1706	NCB21EK-104X	C CAP.	0.1µF 25V	K
	C1707	NCB21HK-103X	C CAP.	0.01µF 50V	K

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1708	QETN1EM-476Z	E CAP.	47µF 25V	M
	C1709	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1710	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1711-13	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1714-15	NDC21HJ-330X	C CAP.	33pF 50V	J
	C1716-17	NDC21HJ-181X	C CAP.	180pF 50V	J
	C1718	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1719	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1720	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1721	NCB21HK-333X	C CAP.	0.033µF 50V	K
	C1722	NDC21HJ-101X	C CAP.	100pF 50V	J
	C1724	NDC21HJ-560X	C CAP.	56pF 50V	J
	C1728-29	NDC21HJ-181X	C CAP.	180pF 50V	J
	C1730	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1738	QETN1HM-226Z	E CAP.	22µF 50V	M
	C1744	NCB21HK-103X	C CAP.	0.01µF 50V	K
	C1805	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1806	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1811	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1841	NCB21HK-152X	C CAP.	1500pF 50V	K
⚠	C1901	QFZ9040-104	MF CAP.	0.1µFAC275V	M
⚠	C1904	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1905	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1907	QCZ9082-222Z	C CAP.	2200pFAC250V	M
⚠	C1909	QEZ0199-127	E CAP.	120µF 400V	M
⚠	C1910	QFZ9040-473	MM CAP.	0.047µFAC275V	M
	C1922	QFLC1HJ-471Z	M CAP.	470pF 50V	J
	C1924	QETN1VM-107Z	E CAP.	100µF 35V	M
	C1926	QFLC1HJ-332Z	M CAP.	3300pF 50V	J
	C1928	NCB21HK-473X	C CAP.	0.047µF 50V	K
	C1929	QFP32GJ-223Z	PP CAP.	0.022µF 400V	J
	C1930	QCZ0325-561	C CAP.	560pF 2000V	K
	C1931-32	QCZ0325-151	C CAP.	150pF 2000V	K
	C1941	QCZ0122-561	C CAP.	560pF 2000V	K
	C1942	QEZ0420-107	E CAP.	100µF 160V	M
	C1945	QEHR1CM-108Z	E CAP.	1000µF 16V	M
	C1946	QEHR1CM-477Z	E CAP.	470µF 16V	M
	C1948	QEHR1VM-108Z	E CAP.	1000µF 35V	M
	C1949	NDC21HJ-471X	C CAP.	470pF 50V	J
	C1950	NCB21HK-104X	CHIP CAP.	0.1µF 50V	K
	C1971	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1972	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1976	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1977	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1978	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1979	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1981	QETN1HM-475Z	E CAP.	4.7µF 50V	M
⚠	C1991	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1992	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1993	QCZ9079-102	C CAP.	1000pFAC250V	M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name
⚠	T1522	QQH0058-001	FB TRANSF.
⚠	T1921	QQS0050-001	SW TRANSF.

COIL

Symbol No.	Part No.	Part Name	
L1001-02	QQL244K-8R2Z	COIL	8.2µH
L1101	QQLZ014-2R2	PEAKING COIL	2.2µH
L1103	QQL244K-8R2Z	COIL	8.2µH
L1351-53	QQL244K-470Z	COIL	47µH
L1523	QQL342J-2R2Z	INDUCTOR	
L1551	QQLZ018-560	HEATER CHOKE	
L1701	QQL39BK-5R6Z	COIL	5.6µH
L1941-43	QQL26AK-820Z	COIL	82µH

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D1001	MA3330/L/-X	ZENER DIODE		
	D1102	1SS85-T2	SI.DIODE		
	D1301-02	MA3091/M/-X	ZENER DIODE		
	D1305	RB100A-T2	SI.DIODE		
	D1341-42	MA111-X	SI.DIODE		
	D1351-53	MA3051/H/-X	ZENER DIODE		
	D1354-56	MA111-X	SI.DIODE		
	D1421-22	MA3360/M/-X	ZENER DIODE		
	D1423	1SR124-400A-T2	SI.DIODE		
	D1424-25	MA111-X	SI.DIODE		
	D1427	MA3270/H/-X	ZENER DIODE		
	D1551-52	RGP10J-TS-T3	SI.DIODE		
	D1553	MA3091/M/-X	ZENER DIODE		
	D1554	MA111-X	SI.DIODE		
	D1561	1SR124-400A-T2	SI.DIODE		
⚠	D1562	MTZJ7.5S-T2	SI.DIODE		
	D1571	MA3075/M/-X	ZENER DIODE		
	D1581	MA3200/M/-X	ZENER DIODE		
	D1582	RGP10J-TS-T3	SI.DIODE		
	D1651-52	MA111-X	SI.DIODE		
	D1653	MA3180/M/-X	ZENER DIODE		
	D1703	SPR-39MVWF	L.E.D.		
	D1706-07	MA111-X	SI.DIODE		
	D1731	MA111-X	SI.DIODE		
	D1791-95	MA3056/M/-X	ZENER DIODE		
⚠	D1901	D2SBA60	BRIDGE DIODE		
	D1921	RGP10J-TS-T3	SI.DIODE		
	D1922-24	MA111-X	SI.DIODE		
	D1926	MA3056/M/-X	ZENER DIODE		
	D1927	MA3068/M/-X	ZENER DIODE		
	D1929	RD12E/B2/-T5	ZENER DIODE		
	D1930	EG1A-T3	SI.DIODE		
	D1932	MA111-X	SI.DIODE		
	D1933	RD27E/B2/-T5	ZENER DIODE		
	D1941	RU3AM-LFC4	SI.DIODE		
	D1942	RU3YX-LFC4	SI.DIODE		
	D1943	RGP10J-TS-T3	SI.DIODE		
	D1945	MA3075/H/-X	ZENER DIODE		
	D1973-74	MA111-X	SI.DIODE		
	D1982-83	MA111-X	SI.DIODE		
	D1985	MA111-X	SI.DIODE		
	D1986	MA111-X	SI.DIODE		

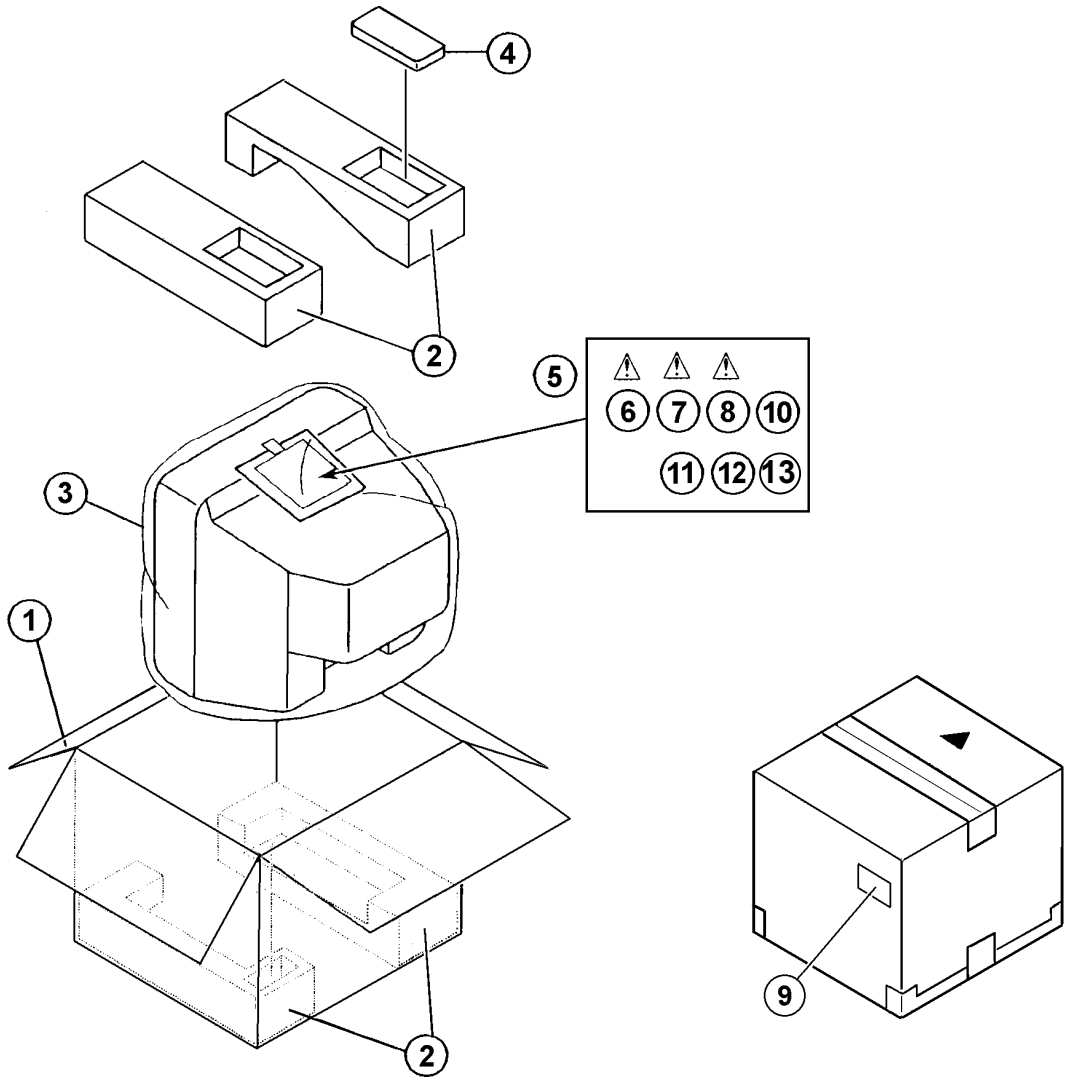
TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q1102	2SC5083/L-P/-T	SI.TRANSISTOR		
	Q1103	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1161	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1301	2SA1037AK/QR/-X	SI.TRANSISTOR		
	Q1302	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1351-53	2SC4722/NP/	SI.TRANSISTOR		
	Q1401	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1402	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1521	2SK3065-W	CHIP FET		
⚠	Q1522	BU808DFI-030Y	SI.TRANSISTOR		H.OUT
	Q1523-24	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1571	2SA949/Y/Z1-T	SI.TRANSISTOR		
	Q1572	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1651	2SA1037AK/QR/-X	SI.TRANSISTOR		
	Q1652	DTC323TK-X	DIGI.TRANSISTOR		
	Q1654-55	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1702-03	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1705-06	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1803	2SC1815/YG/-T	SI.TRANSISTOR		
	Q1804	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1941	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1943	DTC114EKA-X	DIGI.TRANSISTOR		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSISTOR				
	Q1973	2SC2412K/QR/-X	SI.TRANSISTOR		
	Q1974	2SA966/OY/-T	SI.TRANSISTOR		
	Q1975	DTC124EKA-X	DIGI.TRANSISTOR		
	Q1981	2SA1037AK/QR/-X	DIGI.TRANSISTOR		
⚠	Q1982	2SC2785/JH/-T	DIGI.TRANSISTOR		
	IC				
	IC1301	NN5198K	I C		
	IC1421	AN5539-LF	I C		
⚠	IC1651	LA4287	I C		
	IC1652	SI-5001X-X	I.C(HYBRID)		
	IC1701	MN1873287JX	I.C(MICRO-COMP)		
	IC1702	AT24C08-F21TR3	I.C.	(SERVICE)	
	IC1703	L78LR05E-MA	I.C.(MONO-ANA)		
	IC1704	PIC-28143SY	IR DETECT UNIT		
	IC1921	STR-G6653	I C		
	IC1941	SE115N-LF12	I C		
	IC1971	BA51W12ST-V5	I C		
	OTHERS				
		LC30349-001A-H	LED HOLDER		
	CF1161	SFSH4.5MCB	CERAMIC FILTER		
⚠	CP1981	ICP-N75-Y	I.C.PROTECT		
⚠	CP1982	ICP-N75-Y	I.C.PROTECT		
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A	
	FC1901	CEMG002-001Z	FUSE CLIP		
	J1002	CEMN075-001	PIN JACK		
	J1003	CEMN065-001	PIN JACK		
	J1004	CEMN065-002	PIN JACK		
	J1005	QMS3004-C01	HEADPHONE JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1351	CE41433-001Z	BEADS CORE		
	K1421	CE42050-001Z	CORE		
	K1921-22	QQR0872-001Y	FERRITE BEADS		
	K1923	QQR0716-001Z	LEAD CORE		
	K1924	QQR0872-001Y	FERRITE BEADS		
	K1941-43	QQR0872-001Y	FERRITE BEADS		
⚠	LF1901	QQR0906-001	LINE FILTER		
⚠	PC1921	PC123F2	I.C.(PH.COUPLER)		
⚠	RY1971	QSK0061-001	RELAY		
	S1701	QSW0619-003Z	PUSH SWITCH	VOL +	
	S1702	QSW0619-003Z	PUSH SWITCH	VOL -	
	S1703	QSW0619-003Z	PUSH SWITCH	CH +	
	S1704	QSW0619-003Z	PUSH SWITCH	CH -	
	S1705	QSW0619-003Z	PUSH SWITCH	MENU	
⚠	S1901	QSW0750-001	PUSH SWITCH	POWER SW	
	SF1102	QAX0594-001	SAW FILTER		
	SF1122	QAX0325-001	SAW FILTER		
⚠	SK1351	CE42554-001	C.R.T.SOCKET		
⚠	TH1901	QAD0101-9R0	P.THERMISTOR		
⚠	TU1001	QAU0094-002	VHF/UHF TUNER		
⚠	VA1901	ERZV10V621CS	VARISTOR		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	W1155	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1231	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1270-72	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1276-77	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1286	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1294-95	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1338	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1422	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1427	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1527	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1529-30	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1532	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1541	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1549-50	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1553	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1574	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1581	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1583	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1586	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1590-93	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1595	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	W1600-01	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	X1301	QAX0500-001Z	CRYSTAL		
	X1302	CE42690-001Z	CRYSTAL		
	X1701	FCR12.0M2S	CER.RESONATOR		
	Y1302	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1372-74	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1704	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1921	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1941-42	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1945	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
	Y1972	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
AV-A14M3					
	1	CP11781-084-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0650-001A-H	INST.BOOK		
⚠	7	LCT0651-001A-H	DIGEST MANUAL		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	9	CM47385-00B-H	POS/SERIAL LABEL		
AV-A14M3(-A)					
	1	CP11781-084-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0650-001A-H	INST.BOOK		
⚠	7	LCT0653-001A-H	DIGEST MANUAL		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	9	CM47385-00B-H	POS/SERIAL LABEL		
	12	QAM0055-001	CONVERSION PLUG		

PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local

AV-A14M3(U)

	1	CP11781-084-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0650-001A-H	INST.BOOK		
⚠	7	LCT0651-001A-H	DIGEST MANUAL		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	13	CP30702-001	REC KEEPING CARD		

AV-A14T3

	1	CP11781-079-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0650-001A-H	INST.BOOK		
⚠	7	LCT0652-001A-H	DIGEST MANUAL		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	9	CM47385-00B-H	POS/SERIAL LABEL		

AV-A14T3(-A)

	1	CP11781-074-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0650-001A-H	INST.BOOK		
⚠	7	LCT0653-001A-H	DIGEST MANUAL		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	9	CM47385-00B-H	POS/SERIAL LABEL		
	12	QAM0055-001	CONVERSION PLUG		

AV-A14T3(HK)

	1	CP11781-074-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0648-001A-H	INST BOOK		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	9	CM47385-00B-H	POS/SERIAL LABEL		

AV-A14AU3

	1	CP11781-095-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0650-001A-H	INST.BOOK		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	9	CM47385-00B-H	POS/SERIAL LABEL		
	10	BT-56001-2	WARRANTY CARD		
	11	BT-56002-2	S CENTER LIST		

AV-1413EE

	1	CP11781-075-H	PACKING CASE		
	2	LC10166-002A-H	CUSHION ASS'Y	4pcs in 1set	
	3	CP30967-002-H	POLY BAG		
	4	RM-C360-1H	REMOCON UNIT		
	5	CP30966-001-H	POLY BAG		
⚠	6	LCT0647-001A-H	INST BOOK		
⚠	8	CM36447-00A-H	ROD ANTENNA		
	9	CM47385-00B-H	POS/SERIAL LABEL		
	10	BT-54012-1	WARRANTY CARD		

AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

AV-A14M3 / AV-A14M3(U) / AV-A14M3(-A)
AV-A14T3 / AV-A14T3(HK) / AV-A14T3(-A) / AV-1413EE / AV-A14AU3

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal : Colour bar signal
(2)Setting positions of each knob/button and variable resistor :Original setting position when shipped
(3)Internal resistance of tester :DC 20kΩ/V
(4)Oscilloscope sweeping time :H ⇒ 20μS/div
:V ⇒ 5mS/div
:Others ⇒ Sweeping time is specified
(5)Voltage values :All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value
No unit :[Ω]
K :[KΩ]
M :[MΩ]
●Rated allowable power
No indication :1/10[W]
Others :As specified
●Type
No indication :Carbon resistor
OMR :Oxide metal film resistor
MFR :Metal film resistor
MPR :Metal plate resistor
UNFR :Uninflammable resistor
FR :Fusible resistor
*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

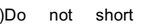
●Capacitance value
1 or higher :[pF]
less than 1 :[μF]
●Withstand voltage
No indication :DC50[V]
AC indicated :AC withstand voltage [V]
Others :DC withstand voltage [V]
*Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

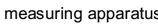
●Type
No indication :Ceramic capacitor
MY :Mylar capacitor
MM :Metalized mylar capacitor
PP :Polypropylene capacitor
MPP :Metalized polypropylene capacitor
MF :Metalized film capacitor
TF :Thin film capacitor
BP :Bipolar electrolytic capacitor
TAN :Tantalum capacitor

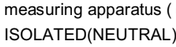
(3)Coils

No unit :[μH]
Others :As specified

(4)Power Supply


:B1


:9V


:5V

*Respective voltage values are indicated

(5)Test point

:Test point

:Only test point display

(6)Connecting method

:Connector

:Wrapping or soldering

:Receptacle

(7)Ground symbol

:LIVE side ground

:ISOLATED(NEUTRAL) side ground

:EARTH ground

:DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

VP0001
DP1054

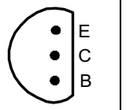
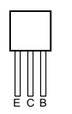
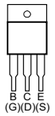
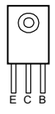
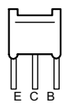
Jan. 2000 No.51669

CONTENTS

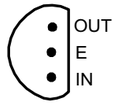
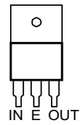
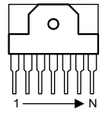
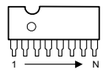
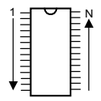
SEMICONDUCTOR SHAPES ····· 2-2
BLOCK DIAGRAM ····· 2-3
CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAMS*(Inc. CRT SOCKET PWB)* ····· 2-5
MAIN PWB CIRCUIT DIAGRAMS*[Inc. CRT SOCKET PWB : for AV-A14M3(U)]* ····· 2-9
PATTERN DIAGRAMS
MAIN PWB PATTERN ····· 2-13
CRT SOCKET PWB PATTERN *(Within MAIN PWB)* ····· 2-15

SEMICONDUCTOR SHAPES

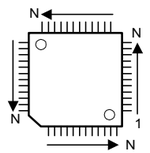
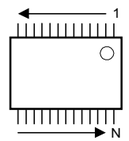
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

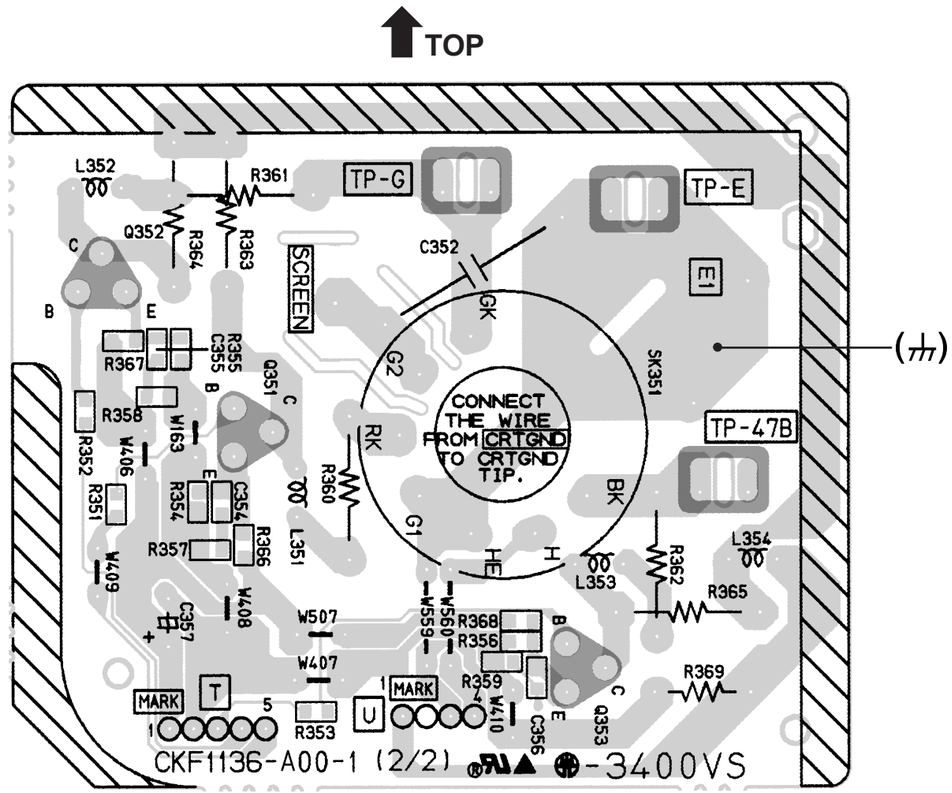
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

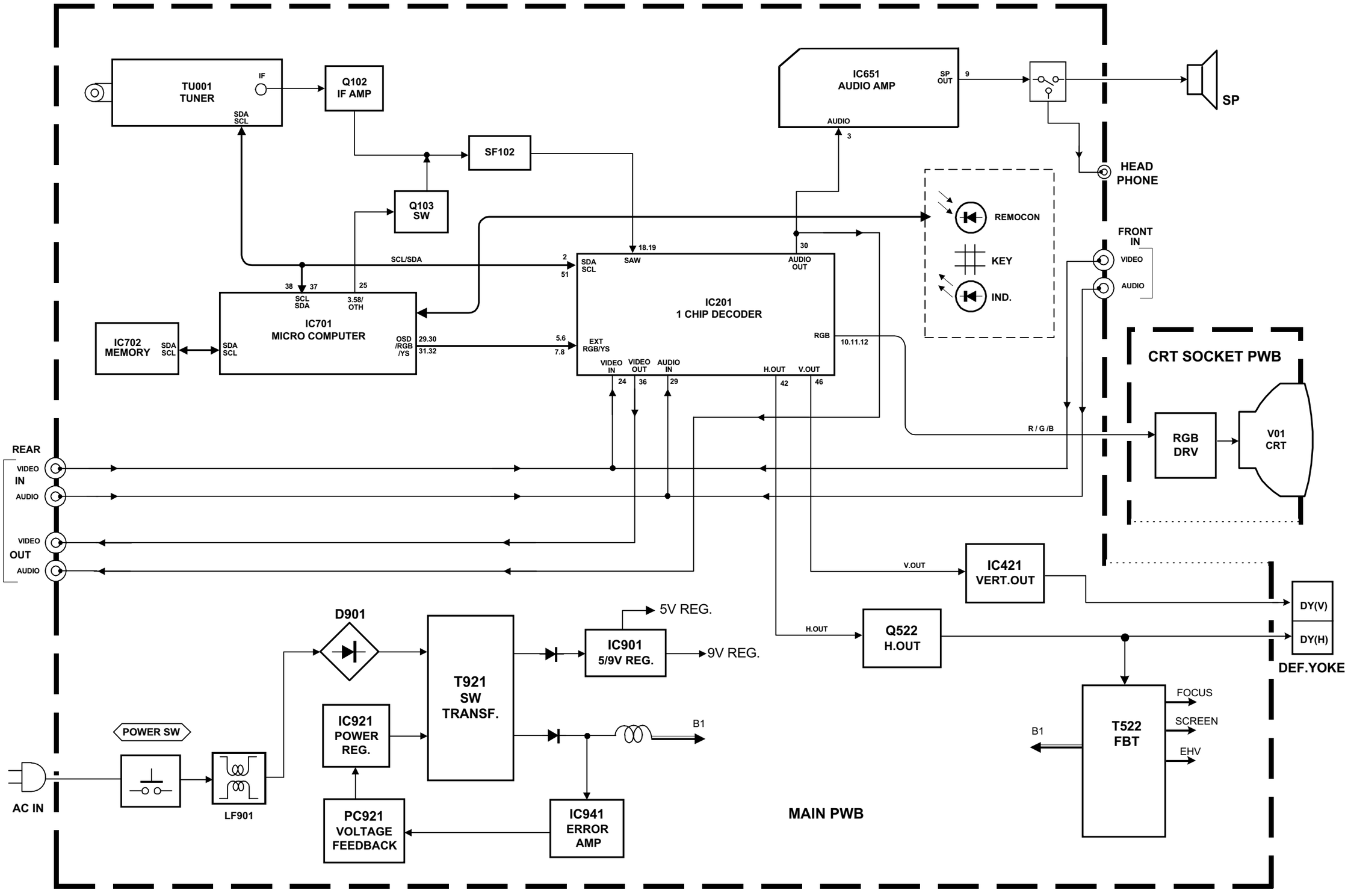
TOP VIEW		
		

[CRT SOCKET PWB PATTERN] (Within MAIN PWB)

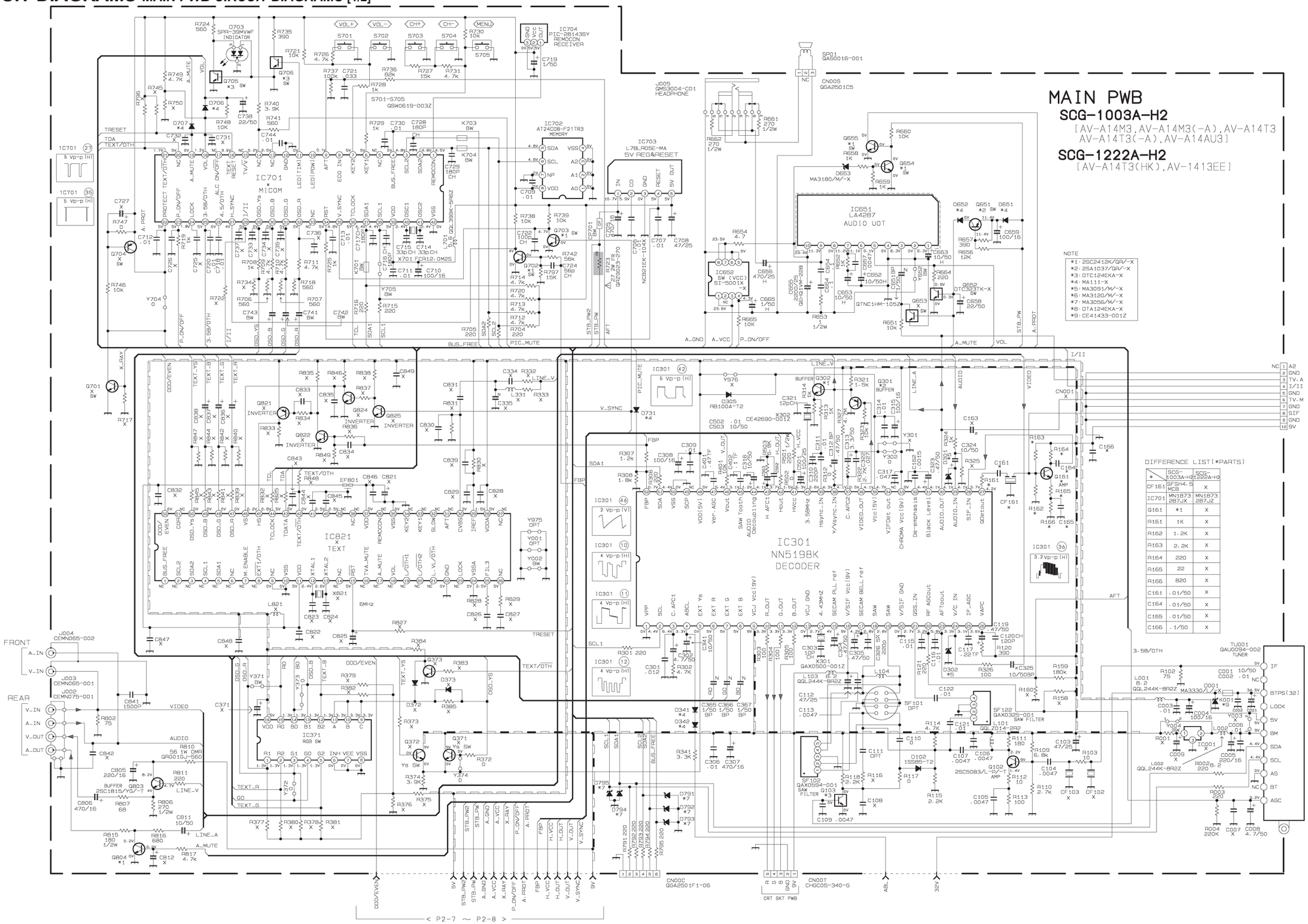


AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

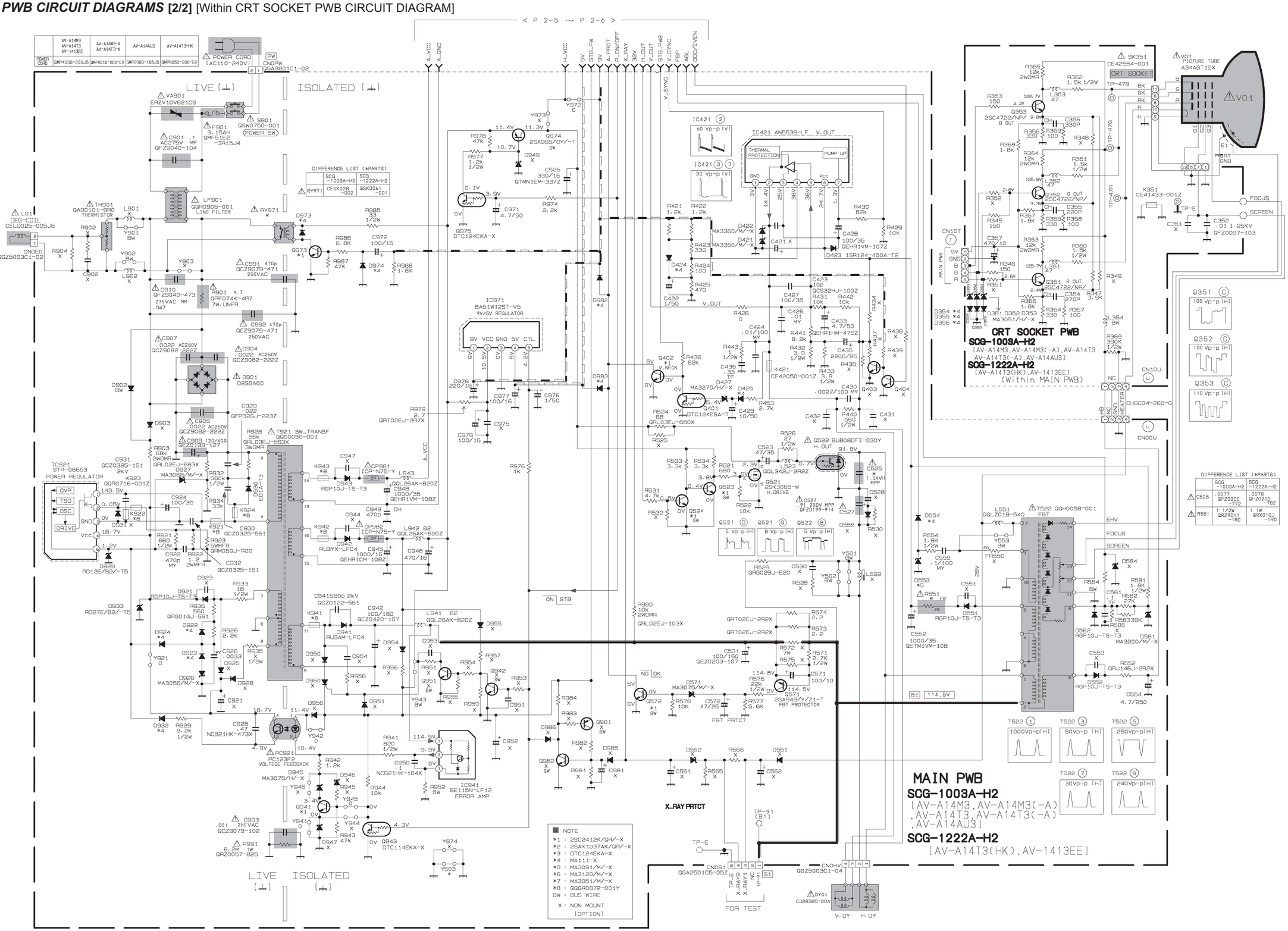
BLOCK DIAGRAM



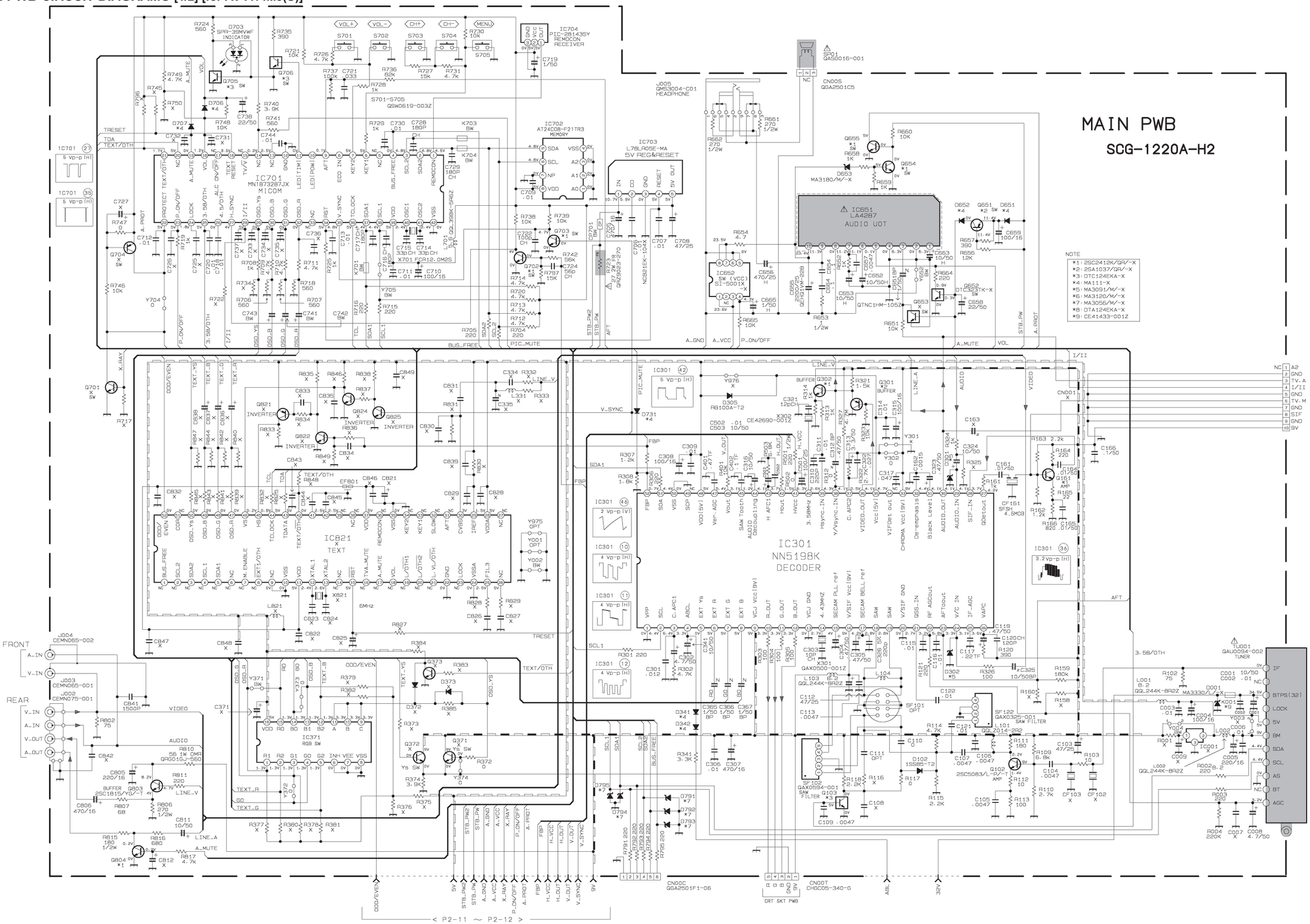
CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAMS* [1/2]



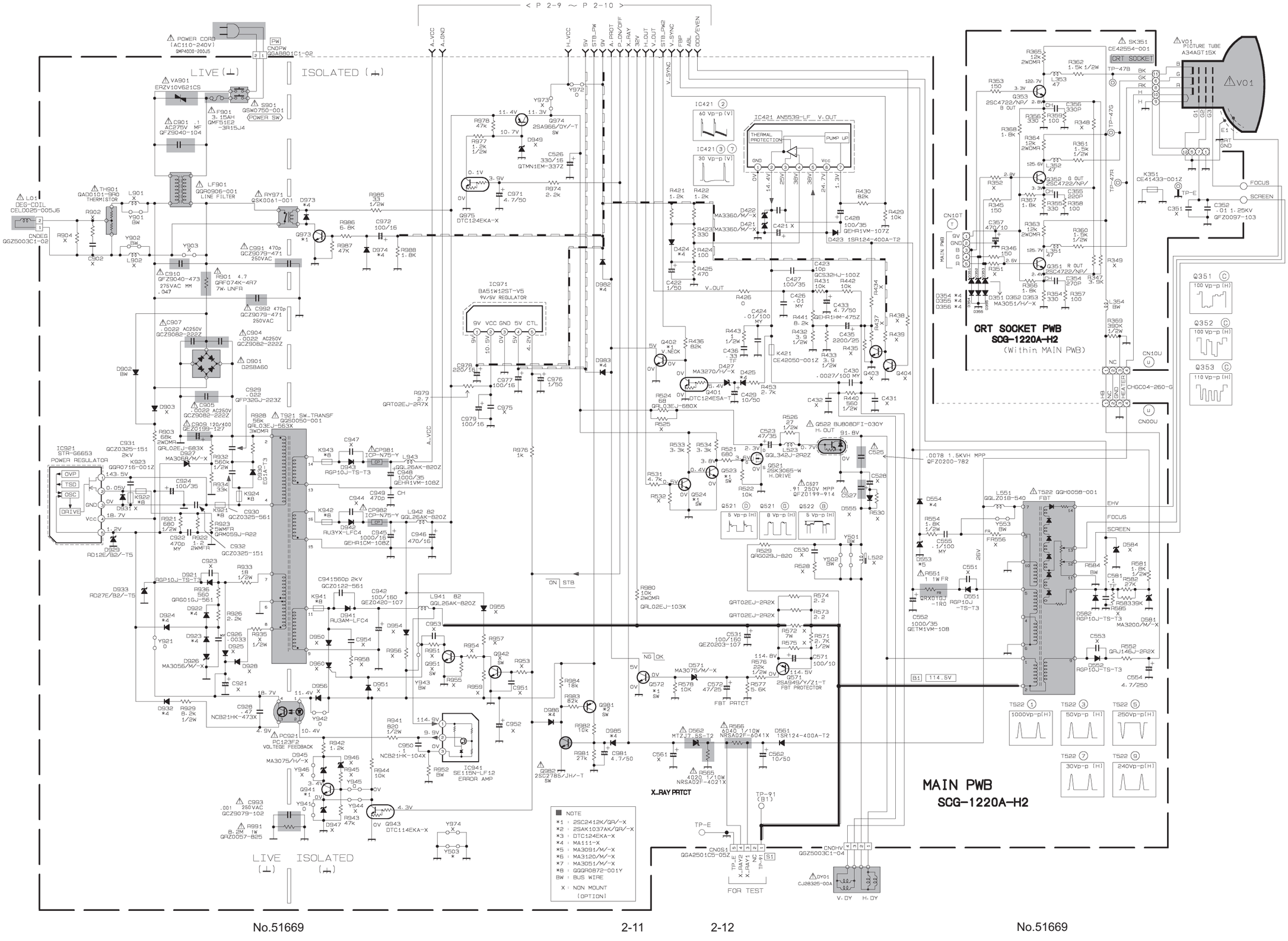
MAIN PWB CIRCUIT DIAGRAMS **[2/2]** [Within CRT SOCKET PWB CIRCUIT DIAGRAM]



MAIN PWB CIRCUIT DIAGRAMS [1/2] [for AV-A14M3(U)]



MAIN PWB CIRCUIT DIAGRAMS **[2/2]** [(Within CRT SOCKET PWB CIRCUIT DIAGRAM) **for AV-A14M3(U)**]



AV-A14M3
AV-A14T3
AV-A14AU3
AV-1413EE

PATTERN DIAGRAMS *[MAIN PWB PATTERN]*